

APPENDICES

There are no pages A1-A13

09475608 010600

APPENDIX 1 Computer Programs

BUILD FALSE

```

5      #!/usr/leo/bin/perl

      if (scalar @ARGV <4) { die "Need Pool, Seq, #False positives, #False negatives\n"; }

10     $FalsePos=$ARGV[2];
      $FalseNeg=$ARGV[3];
      open(POOL,$ARGV[0]);
      print "Using pool $ARGV[0]\n";
      $pools=0;
15     while(<POOL>)
      {
          last if (/TotCost/);
          chop $_;
          @Probes=split(/[: ]/, $_);
20         shift @Probes;
          shift @Probes;
          shift @Probes;
          if (scalar @Probes > 0)
          {
25             @{$Pool[$pools]}=@Probes;
             foreach $probe (@Probes)
             {
30                 $PoolInd{$probe}=$pools;
             }
             $pools++;
          }
      }

      print "Using sequence $ARGV[1]\n";
35     open(SEQ,$ARGV[1]);
      $Seq="";
      while (<SEQ>)
      {
          chop $_;
40         $Seq .= uc($_);
      }

      $Found=0;

```

```

undef(%Mers);
undef(@Solutions);
undef(%On);
foreach $i(0..length($Seq)-10)
5  {
    $fprobe=substr($Seq,$i,5);
    $lprobe=substr($Seq,$i+5,5);
    $pool=$PoolInd{$lprobe};
    $On{$fprobe}{$pool}=1;
10 }
foreach $prb (keys %On)
{
    foreach $pool (keys %{$On{$prb}})
    {
15         print "True Signal: fp=$prb pool=$pool\n";
        push @Signals, new_signal($prb,$pool);
    }
}
$NumOn=scalar @Signals;
20
@char = qw( A C G T );
foreach $1(@char) {
    foreach $2(@char) {
        foreach $3(@char) {
            foreach $4(@char) {
25                 foreach $5(@char) {
                    push @Probes, $1.$2.$3.$4.$5;
                }
            }
        }
    }
}
foreach $i (1..$FalsePos)
30 {
    $pool = int(rand($pools));
    $fixed = $Probes[rand(1024)];
    $On{$fixed}{$pool}=1;
    print "False positive Signal: fp=$fixed pool=$pool\n";
35 }

foreach $i (0..$FalseNeg-1)
{
40     $tmpSignal=$Signals[$i];
    $randPos = $i + int($NumOn);
    $Signal=$Signals[$randPos];
    $Signals[$i]=$Signal;
    $Signals[$randPos]=$tmpSignal;

```


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```

    {
        foreach $Ch (@Chars)
        {
            $Mers{$Ch.$submer.$ch}=1;
5          }
        }
    }
    foreach $o (1..$overlap)
    {
10      foreach $submer (keys %{$Postfix[$o]})
        {
            @chars=split(/ /,$Prefix[$o]{$submer});
            @Chars=split(/ /,$Postfix[$o]{$submer});
            foreach $ch (@chars)
15          {
                foreach $Ch (@Chars)
                {
                    $Mers{$Ch.$submer.$ch}=1;
20                }
            }
        }
    }
    foreach $i (0..length($Seq)-11)
    {
25      $mer = substr($Seq,$i,11);
        if (!$Mers{$mer})
        {
            print STDERR $mer, " not found!\n";
            exit(1);
30        }
    }

    print STDERR "11mers:", scalar (keys %Mers),"n";
    print "11mers:", scalar (keys %Mers),"n";
35    foreach $lenMer (12..length($Seq))
    {
        undef(%Prefix);
        undef(%Postfix);
        foreach $mer (keys %Mers)
40        {
            $Prefix{substr($mer,0,length($mer)-1)}.=substr($mer,length($mer)-1,1);
            $Postfix{substr($mer,1,length($mer)-1)}.=substr($mer,0,1);
        }
    }
}
```

```

5      undef(%Mers);
      foreach $submer (keys %Postfix)
      {
          @chars=split(/,$Prefix{$submer});
          @Chars=split(/,$Postfix{$submer});
          foreach $ch (@chars)
          {
              foreach $Ch (@Chars)
              {
10                 $Mers{$Ch.$submer.$ch}=1;
              }
          }
      }
      print STDERR $lenMer,"mers:", scalar (keys %Mers),"\\n";
15      print $lenMer,"mers:", scalar (keys %Mers),"\\n";
      if (($lenMer%50 == 0) && (scalar (keys %Mers) > 4000))
      {
          print STDERR "Cleaning...";
          $Cleaned=0;
          foreach $seq (keys %Mers)
          {
20              undef(%testOn);
              foreach $i(0..length($seq)-10)
              {
25                  $fprobe=substr($seq,$i,5);
                  $pool=$PoolInd{substr($seq,$i+5,5)};
                  $testOn{$fprobe}{$pool}=1; #To see if all are fully represented
              }
              $NumtestOn=0;
              foreach $prb (keys %testOn) { $NumtestOn += scalar (keys
30              %{$testOn{$prb}}); }
              if ($NumtestOn<($lenMer-15))
              {
35                  $Cleaned++;
                  delete $Mers{$seq};
              }
          }
          print STDERR "$Cleaned cleaned out.\\n";
40      }
      print STDERR "Checking all ",scalar (keys %Mers), " solutions for full dot-representation...";
      print OUT "#Growths: ", scalar (keys %Mers)," ";

```

```

NEXT:foreach $seq (keys %Mers)
{
    undef(%testOn);
    foreach $i(0..length($seq)-10)
    5      {
        $fprobe=substr($seq,$i,5);
        $pool=$PoolInd{substr($seq,$i+5,5)};
        $testOn{$fprobe}{$pool}=1; #To see if all are fully represented
    }
    10    $NumtestOn=0;
    foreach $prb (keys %testOn) { $NumtestOn += scalar (keys %{$testOn{$prb}}); }
    if ($seq eq $Seq)
    {
        $Found=1;
        15    $seq .= " True solution ";
    }
    if ($NumtestOn>=$NumOn)
    {
        20    push @Solutions, $seq;
        print "$seq DotsOn=$NumtestOn\n\n";
    }
}
print STDERR "done.\n",scalar @Solutions, " consistent solutions found";
if ($Found)
    25    {
        print STDERR " including the true one.";
    }
    else {
        print STDERR " - TRUE not FOUND!!";
    30    }
print "Solutions: ",scalar @Solutions, " ";

sub new_signal
{
    35    my ($fp,$pool)=@_;
    my @Signal = ($fp,$pool);
    return \@Signal;
}

```

BuildMMult

#!/usr/leo/bin/perl

5 if (scalar @ARGV <4) { die "Need Pool, Seq, #False positives, #False negatives\n"; }

\$FalsePos=\$ARGV[2];

\$FalseNeg=\$ARGV[3];

open(PPOOL,\$ARGV[0]);

10 print "Using pool \$ARGV[0]\n";

\$pools=0;

while(<PPOOL>)

{

last if (/TotCost/);

15 chop \$_;

@Probes=split(/[:]/, \$_);

shift @Probes;

shift @Probes;

shift @Probes;

20 if (scalar @Probes > 0)

{

@{\$Pool[\$pools]}=@Probes;

foreach \$probe (@Probes)

{

25 \$PoolInd{\$probe}=\$pools;

}

\$pools++;

}

}

30 print "Using sequence \$ARGV[1]\n";

open(SEQ,\$ARGV[1]);

\$Seq="";

while (<SEQ>)

35 {

chop \$_;

\$Seq .= uc(\$_);

}

40 \$Found=0;

undef(%Mers);

undef(@Solutions);

undef(%On);

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```

}
foreach $prb (keys %On)
{
    5      foreach $pool (keys %{$On{$prb}})
        {
            if ($On{$prb}{$pool}==1)
            {
                10      foreach $probeInPool (@{$Pool[$pool]})
                    {
                        $Mers{$prb.$probeInPool}=1;
                    }
            }
        }
    }
    15  print STDERR "10mers:", scalar (keys %Mers),"n";
    print "10mers:", scalar (keys %Mers),"n";
    # $overlap=2;
    #foreach $mer (keys %Mers)
    #{
    20  #   foreach $o (1..$overlap)
    #   {
    #       $Prefix[$o]{substr($mer,0,length($mer)-$overlap)}.=
    #           substr($mer,length($mer)-$overlap,$o)." ";
    #       $Postfix[$o]{substr($mer,$overlap,length($mer)-$overlap)}.=
    25  #           substr($mer,$o-1,$overlap+1-$o)." ";
    #   }
    #}
    undef(%Pre);
    undef(%Post);
    30  foreach $mer (keys %Mers)
        {
            $Pre{substr($mer,0,length($mer)-1)}.=substr($mer,length($mer)-1,1);
            $Post{substr($mer,1,length($mer)-1)}.=substr($mer,0,1);
        }
    35  undef(%Mers);
    foreach $submer (keys %Post)
        {
            @chars=split(//,$Pre{$submer});
            @Chars=split(//,$Post{$submer});
            40  foreach $ch (@chars)
                {
                    foreach $Ch (@Chars)
                        {

```

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```

    $Mers{$Ch.$submer.$ch}=1;
  }
}
5  #foreach $o (1..$overlap)
  #{
  #    foreach $submer (keys %{$Postfix[$o]})
  #    {
  #        @chars=split(/ /,$Prefix[$o]{$submer});
  10  #        @Chars=split(/ /,$Postfix[$o]{$submer});
  #        foreach $ch (@chars)
  #        {
  #            foreach $Ch (@Chars)
  #            {
  15  #                $Mers{$Ch.$submer.$ch}=1;
  #            }
  #        }
  #    }
  #}
  20  foreach $i (0..length($Seq)-11)
  {
    $mer = substr($Seq,$i,11);
    if (!$Mers{$mer})
    {
  25      print STDERR $mer, " not found!\n";
      exit(1);
    }
  }

  30  print STDERR "11mers:", scalar (keys %Mers), "\n";
  print "11mers:", scalar (keys %Mers), "\n";
  foreach $lenMer (12..length($Seq))
  {
    undef(%Prefix);
  35    undef(%Postfix);
    foreach $mer (keys %Mers)
    {
      $Prefix{substr($mer,0,length($mer)-1)}.=substr($mer,length($mer)-1,1);
      $Postfix{substr($mer,1,length($mer)-1)}.=substr($mer,0,1);
  40    }
    undef(%Mers);
    foreach $submer (keys %Postfix)
    {

```

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```

    @chars=split(//,$Prefix{$submer});
    @Chars=split(//,$Postfix{$submer});
    foreach $ch (@chars)
    {
5         foreach $Ch (@Chars)
        {
            $Mers{$Ch.$submer.$ch}=1;
        }
    }
10
    print STDERR $lenMer,"mers:", scalar (keys %Mers),"n";
    print $lenMer,"mers:", scalar (keys %Mers),"n";
    if (($lenMer%50 == 0) && (scalar (keys %Mers) > 4000))
    {
15         print STDERR "Cleaning...";
        $Cleaned=0;
        foreach $seq (keys %Mers)
        {
20             undef(%testOn);
            foreach $i(0..length($seq)-10)
            {
                $fprobe=substr($seq,$i,5);
                $pool=$PoolInd{substr($seq,$i+5,5)};
                $testOn{$fprobe}{$pool}=1; #To see if all are fully represented
            }
25             $NumtestOn=0;
            foreach $prb (keys %testOn) { $NumtestOn += scalar (keys
%{$testOn{$prb}}); }
            if ($NumtestOn<($lenMer-15))
30             {
                $Cleaned++;
                delete $Mers{$seq};
            }
        }
35         print STDERR "$Cleaned cleaned out.\n";
    }
}
print STDERR "Checking all ",scalar (keys %Mers), " solutions for full dot-representation...";
print OUT "#Growths: ", scalar (keys %Mers)," ";
40
NEXT:foreach $seq (keys %Mers)
{
    undef(%testOn);

```

```

foreach $i(0..length($seq)-10)
{
    $fprobe=substr($seq,$i,5);
    $pool=$PoolInd{substr($seq,$i+5,5)};
    $testOn{$fprobe}{$pool}=1; #To see if all are fully represented
}
$NumtestOn=0;
foreach $prb (keys %testOn) { $NumtestOn += scalar (keys %{$testOn{$prb}}); }
if ($seq eq $Seq)
{
    $Found=1;
    $seq .= " True solution ";
}
if ($NumtestOn>=$NumOn)
{
    push @Solutions, $seq;
    print "$seq DotsOn=$NumtestOn\n\n";
}
}
print STDERR "done.\n",scalar @Solutions, " consistent solutions found";
if ($Found)
{
    print STDERR " including the true one.";
}
else {
    print STDERR " - TRUE not FOUND!!";
}
print "Solutions: ",scalar @Solutions," ";

sub new_signal
{
    my ($fp,$pool)=@_;
    my @Signal = ($fp,$pool);
    return \@Signal;
}

```

APPENDIX 2
Experimental Target Sequence r300

5 GTAGGGGTAG ACATCGCGTA AAAGGGGCGT ACCCAGGACC CCCCTTGGCT CAATAAGTAG
CGCTGGGGTG CTACTACGGG TCTCGACACG CATTCAACTA AAAGCTTCCA TTCGCACGGG
CTTATTTAAC GAAGGTCGCG ATAAGGTGCC GAATAGGCTG CAGAGCGGCA GCCTGTCCAG
TGAATGCTGT GAGGCCTCCA GCTGACTCAT GAGAGAAGCC CAGTATTCAA ACTACGATTC
CACTCGACAA TTTAGGATGT CTTCCCGAAA GCTATCGGGT AGAATATCAG ATTCGTTTAA

10

APPENDIX 3

D16 and DN16 Pools of Probes

D16

5

Group 0:64:

10

GATTT	CAGCT	GAAAA	TGGTT	AAAGT	CGCTC
AAGAT	CAAGC	TAACG	GCCTC	TGCAA	CAATG
AGAAC	TCAAA	ACTAT	TCAGT	GGGAA	TTCTA
TTGCT	GTAAG	GGTAC	TTAGA	TAGTC	CCACA
CTCTT	ATGAA	TCTGA	ACCGC	TACAC	CCTTA
AACAG	TGGGG	GCACC	GTGGC	GGCTG	GTCCA
TATGT	GGACT	AGCGA	TGATG	GATCA	TCCCG
TCTCC	GCGGG	GTCGT	CGCCG	ATTGG	GTATC
AGTTA	ATACT	CTTCC	CCCAG	GCCAT	TGTTC
GTTTG	CGTAG	TTTAT	AACCC	CCGAC	CAGGA
CTGCG	CGATA	ACGTG	AGGCA		

20

Group 1:64:

25

GTAAA	TCAGG	ACTCC	ATTAC	CCTGT	GCCCG
GGATG	CAACG	AATGG	TATCG	CTCAA	TGCCG
GAGGA	TAATC	CAAGT	TGCTA	ACCAA	TAGAA
GGCTC	TACGC	CGGGG	TTATA	CTCGG	CTACC
ATCTG	TTTAG	CATAC	CCCCT	GACAG	AGAGA
CCAGA	ACTTA	GCACA	GCTTG	TCCAC	CTGGC
CCGCA	AAACA	ATGTC	TGGGT	TCTTC	ATAGT
TGACC	TTGAT	AGCAT	GTTCA	CGTCA	ACATT
AGGTA	AAGCC	CGAAT	CGGAC	TCGTG	GGCGT
TGTGA	GGTGC	CAGTT	GCGGC	CACTA	GGTCT
GTATT	ATCCT	GCGAT	CTTTT		

35

Group 2:64:

40

TAGGG	GCGTC	GTTTC	AGATT	TGTGT	TTCGA
TAATT	CTGAC	GGGCG	CCAAT	CTAGT	ATTCC
TGCTG	GTCCG	TACCC	AGCAG	GTTCT	ACTCG
TTAAG	CCCGG	CGCCT	GATAG	TACAA	TCATA
CAGAG	TCCCT	CCTAA	GGAGA	CCACC	AGACC
CCGTT	TCTGC	CGATG	AGCGC	CGGTA	ACAGG
ATGGG	AAGTG	CATGT	GCATT	CAGTC	CTTTG
TTGTT	TGAAC	GAAGG	GGCAA	GACTA	ACGAC
ACCAT	CAACA	AATAC	GACGT	ATAAA	GTAGC
GAGGC	AAACT	CTCTC	GCTCA	CGTGC	ATCTA
GGGAT	TTGCA	ACGGA	AGTAA		

45

Group 3:64:

5	ACGGT	CGGCA	ATACG	CCTTC	AACGC	CGCGC
	CGACG	CGGGT	GTGAA	AGCAA	CTAGA	TCGTA
	GAACT	TGTGC	GCCCC	TTCTT	TGCCT	TCAAG
	CCTGG	TAAGG	TCCTC	ATCAC	CACTT	ACGAG
	GTTGT	TTAGC	CACAG	GCATA	AAATC	CTAAT
	GCAGC	GAGAC	GGTAG	TGACA	AATAT	TATTC
10	TTGCG	GCTAT	TGGAT	GATGG	ATGTT	TACCA
	ATTTG	TCTCG	CTTTA	ATTGA	CTCCC	AGGCC
	GTCGG	GGTTA	AAGCG	ACTCA	TCCGT	AGCTG
	CATCC	AGAGG	GAGTG	GTGTC	AAAAA	CCCAA
	CGATT	CCGCT	TAGGA	TGGTG		

Group 4:64:

20	TAAAT	CGTAT	AAAAG	CAAGA	ACGAT	GAACA
	TTCGC	AACGG	TATGA	ATCAA	TCCAA	CGCGT
	CAGAA	AACCT	GCGCA	GAGGG	AATGT	ATGCC
	CTGGT	GGGCT	GAGTT	AAGTA	CAGCC	TGTAC
	CAATC	AGCTC	GCAAC	ATGGA	TAGCA	TCTCT
	GCCGT	CTACG	CTTAC	GTTAG	CCTGC	CGTCG
25	TTCCG	TCGGG	GACAC	ACATG	GGCGA	AGACT
	GGATA	GTCCT	ATAAC	CCATT	CACTG	GATTC
	TACTA	CCCCA	ATTTC	GGGAG	CCGAG	CATCT
	TGAGC	GGTCA	GTAGG	AGTGG	TCACC	CGCCC
	GCTTT	TTATT	TGTTG	TTGTG		

Group 5:64:

35	GGGCC	TCTAG	ACCGA	GAAAT	CATAG	CCTGA
	GTTAC	AACAA	TGCGC	CGGAA	AACCT	TAAAA
	ATAAG	CGCTT	GCTCT	ACTGT	TCCAT	ATGAT
	CTTCG	CTGGG	AATCG	CAGCA	TTCTG	GCTAA
	TGGTA	CCCCG	CTATA	AGCGG	GAACG	CACGG
	TGTAT	GCCGC	TACCT	TCGCC	TAGAC	GTGTT
40	AGATA	GACCC	TAGGT	AAGGC	ACACC	TTATC
	TCATG	CCAAC	CTCAC	GCGTG	GTACA	GACGA
	CCGTC	ATTTT	GATTA	CATTC	CTGCT	CGAGC
	TGACT	AGTTC	GGAGT	CCAGT	AGGAC	GTCAG
	GGTGG	ACGCG	ATCCC	TTTGA		

Group 6:64:

5	AAGGG	CATAT	GCCTA	GAAAC	TGATT	ACAGC
	TCGTC	CAGAC	CCAAG	CGCAA	CAATA	CTCTG
	CGGCG	AGGAG	AACGA	GGCCC	CTACT	ACGCC
	CTCGC	GCGCG	TACCG	AGCAC	TGTAA	TGCGT
	TTGAA	ATAGA	TTAGG	TAAAG	ACTAA	TTTAC
	ATTGT	TATGC	AACTC	ACCAG	TAGCT	AGATG
	TATTA	CATGG	CGTGT	GTCAT	AGTTT	AAAAT
10	CCGGT	TCGAT	ATTCG	GGACA	GGGTA	GAGGT
	CGAAC	GCATC	GCTGA	GTGAG	CCTCA	TCACT
	GACTT	GATCC	GTTGG	TTCCA	CGGGA	ACCCT
	CCTTG	CTTTC	CTGTT	TGGGC		

Group 7:64:

20	TCCGG	CGGGC	AAAAC	GGAAG	GACAA	TGCAC
	GTCTC	CAATT	AGTGT	GCAGT	GGCCG	GCGAA
	CGTTC	TGGCA	AGTAG	TTAAT	CGACT	CTTCA
	AACTG	ACTTT	ACGGC	CTAAC	CGTAA	GACCT
	ACCCC	ATAGG	CTTAG	TACAG	TCGGT	CACGC
	GATAC	CTCGT	CATTA	TGAGA	AGACG	GTGGG
25	CCGTG	GTATA	GATTG	GGTGA	TAGTT	GGGTC
	ATGTA	TCTAC	CAGCG	TCACA	TAAGC	AAGGA
	ATCAT	TTGCC	ATTCT	GTACC	TCCTA	TGTTT
	CGGAT	TTATG	TATCT	AGCCA	ACATA	TCGAG
	GCGCT	TTGGA	CCAGG	CCTCC		

Group 8:64:

35	TTTTC	GCCCA	ATATC	GGAAA	GTTGA	CAGTA
	AGTCC	TGTCG	TCACG	ACCAC	CGATC	TGAAT
	AAAGA	CGTTA	CACAT	CCTCT	GATGC	CTAAG
	CTACA	TATAA	GCGAC	GGGGG	CTCGA	GGCGC
	GTCTT	ATTAT	TAATG	AGGAT	AATCA	TCTGT
	CACCC	AACCG	AATAG	CGGCT	GAGAG	GTGTA
40	CCGAA	GTTCT	ACGCT	CCGCG	GGTTT	AAATT
	AGGTG	TCCTT	ATCGT	TTCAA	ACTTG	ATGGC
	TCGGA	CCCTA	TAGCC	TGCCA	TTGGG	TATTT
	GCATG	AGAAG	CGCAG	CAAGG	TGGAC	GAGCT
	CCAGC	ACAAA	GCCGG	GTACT		

Group 9:64:

	TAGTA	TATCC	GTAAC	ACGTT	TTTAA	CTTGT
	ATACA	CACAA	AGGAA	ATAGC	TTACT	CACCT
5	- CATCG	TTCGT	GCTTA	AACCA	CGCTG	TAGAG
	CCCTT	GCCGA	AATTT	AGTCT	GCGCC	TCGCA
	ATAAT	TAAAC	CTGTA	CGACC	TACGG	GGCGG
	CCGGC	GATAT	CAGGT	CCAAA	TGGTC	TTCCC
	ATCTC	AGGGC	GAATG	TGTCA	GTGAT	GGCCT
10	TTGGC	ATGCG	ACTGA	TCATT	GAAGT	GGGTT
	GCCAC	ACTAC	TCTGG	ACCCG	CGTAC	CTCAG
	AAAGG	CATGA	TTTTG	GACTC	GTTGC	TGCAT
	GCTAG	GGACG	TGAGG	GTGGA		

Group 10:64:

	CCACG	GCAGA	AACGT	GAGAT	GGGCA	CGTTG
	CCGTA	TGATA	GCCTG	TCCGA	AAGCA	GAATA
20	ATTCA	CGAGG	TGGGA	GGCTT	TGAAG	TGTCC
	CCCTC	GCTGT	TAACT	ATCAG	TTCCT	CTCTA
	TTACC	GGAAC	TCGCG	GTTAA	ATGAC	GATCG
	GCAAT	GTGCT	ACTAG	AGGGT	AGCCG	CGCCA
	TTTGG	ATGTG	CTGCC	TCTTT	CATGC	AAATG
25	TCTCA	ACACA	AGTGA	AGTAT	GTCAC	ACATC -
	GACGC	GGTTC	ACCTT	TACTG	CTGGA	GACCA
	AGAGC	ACGGG	CAAAA	GTACG	CGCAT	TCGAC
	TATAT	CTATT	GAGTC	CCTAC		

Group 11:64:

	GAACC	AGCCT	AACAT	CACGT	GGGGC	CTCCA
	GCTCG	ACAAG	GTCTG	GGCTA	TGTAG	ATATT
35	TCGTT	CCACT	ACCTA	CTTAT	CGCAC	TAATA
	TGGCG	TTCGG	TACTC	TTGTC	AGGTC	TCCCA
	CCTTT	GTTCC	ATTTA	GCGGA	GGAAT	TTTCT
	CAAAC	- ATCGC	GAGCG	CTTGA	TCAAC	TTCAT
	TGATC	AGAGT	ACCGG	CGAGA	GCTTC	CAGTG
40	TTAAA	TACGA	CCGCC	AAAGC	AGACA	GGTAA
	CGTGG	GCCAG	CGGTT	GATGT	GCAGG	AATTG
	TAGAT	AAGAA	CATCA	ATGCA	CTGAG	ATGGT
	GTGAC	ACTGC	AGTAC	CTATG		

Group 12:64:

TGCTT	GAGCA	ATATG	TTACA	GGATC	ACACG
CTCAT	CTGTC	AGAAT	TATTG	CTGCA	GCAAA
ATTAA	TACGT	GCCCT	AAGAC	ACCCA	GTCTA
CTAAA	AGTCG	ACCTC	CGCGA	GGTAT	CGAGT
CCTAG	GTCCC	TTCAC	GTGCG	TGGCC	TCGCT
TTGAG	TCAAT	GATGA	AGCTA	GGCAC	CTTCT
GCGGT	ACGAA	ATCGG	CCGGG	TGGAA	TGTGG
CGTTT	AGGCT	GAAAG	GAAGC	AAATA	GGGTG
CACCG	TCAGC	CCATG	GCTCC	CTTGC	CACTC
AATCC	TCCAG	AAGTT	CATAA	CAACC	TCTTA
TGACG	CGGAG	GTAGT	ACAGA		

Group 13:64:

TTTGT	ATTAG	TAAGA	TCGAA	CGACA	ACTTC
AGAAA	GTAGA	AAGTC	CCTAT	GCGTA	CGTCC
ACCGT	TCTTG	GAATT	TCCCC	ATCCG	GCTGC
GTCAA	GATAA	GGTCG	TTCTC	TGGCT	AGGGG
GGGAC	CCATC	GTGGT	GTTTT	AACTA	TCGGC
AAACC	GGCCA	TGAGT	AATGA	CTCCT	GTGCC
CAGGC	TATAC	GACGG	AGGTT	AGCCC	TACAT
CAGAT	GCACG	GTGTG	GGCAT	CGCGG	TTTCA
CCCGA	AATCT	TGCAG	CTGAA	CGGTG	ACACT
CCCAC	TAGCG	CTAGG	CAAAG	TTAAC	ATTGC
GGAGC	ACCTG	TGTTA	ACGCA		

Group 14:64:

CGGTC	GCTGG	GTCGC	TTTCC	TTGTA	CACAC
GCGTT	ACAAC	CGTCT	ACTCT	CGAAA	AGTTG
CTTGG	AGCTT	ACGTA	AGTGC	TGGAG	AGTCA
CTCCG	TTAGT	GTAAT	TTACG	GGGGA	ACAGT
TCATC	ATCGA	CCCAT	CCCGC	GCAAG	TGCCC
TTCAG	GAAGA	AAACG	TAACA	CAAAT	ATGAG
AATAA	ATATA	TGCGA	GGCAG	GCTAC	CTATC
CCGGA	CACCA	GAGAA	TTTTT	CAGGG	GATCT
TACTT	GGTGT	CATTG	GGACC	GACTG	ATGCT
GAGCC	TATGG	TCCTG	TAGGC	AAGGT	AATTC
GTTTA	CTGAT	GGATT	TCTAA		

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10

15

A32 -

DN16

Group 0:64:

5	GATTT	CCTTT	GAAAA	TGGTT	AAAGT	CGCTC
	AAGAT	CAAGC	TAACG	GCCTC	TGCAA	CAATG
	AGAAC	TCAAA	ACTAT	TCAGT	GGGAA	TTCTA
	TTGCT	GTAAG	GGTAC	TTAGA	TAGTC	CCACA
	CTCTT	AACTT	TCTGA	ACCGC	TACAC	GACGA
10	AACAG	TGGGG	GCACC	GTGGC	GGCTG	GTCCA
	TATGT	GGACT	AGCGA	TGATG	GATCA	TCCCG
	TCTCC	GCGGG	GTCGT	CGCCG	ATTGG	GTATC
	AGTTA	ATACT	CTTCC	CCCAG	CTTAT	TTGAG
	GTTTG	CGTAG	CATGG	AACCC	CCGAC	CAGGA
15	CTGCG	CGATA	ACGTG	AGGCA		

Group 1:64:

20	GTAAA	TCAGG	ACTCC	AAAGC	CCTGT	GCCCG
	GGATG	CAACG	AATGG	TATCG	CTCAA	TGCCG
	GAGGA	TAATC	CAAGT	TGCTA	ACCAA	TAGAA
	GGCTC	TACGC	CGGGG	TTATA	CTCGG	CTACC
	ATCTG	TTTAG	CATAC	CCCCT	GACAG	AGAGA
25	CCAGA	ACTTA	GCACA	GCTTG	TCCAC	CTGGC
	CCGCA	AAACA	ATGTC	TGGGT	TCTTC	ACCTT
	TGACC	TTGAT	AGCAT	GTTCA	CGTCA	ACGAG
	AGGTA	ATTGT	CGAAT	CGGAC	TCGTG	GGCGT
	TGTGA	GGTGC	CAGTT	GCGGC	CACTA	GGTCT
30	GTATT	ATCCT	GCGAT	CTTTT		

Group 2:64:

35	TAGGG	GCGTC	GTTTC	TTGGC	CCCCA	TTCGA
	TAATT	AGGTG	GGGCG	CCAAT	CTAGT	ATTCC
	TGCTG	GTCCG	TACCC	AGCAG	GTTCT	ACTCG
	TTAAG	CCCGG	CGCCT	GATAG	TACAA	TCATA
	CAGAG	TCCCT	CCTAA	GGAGA	CCACC	AGACC
40	CCGTT	TCTGC	CGATG	AGCGC	CGGTA	ACAGG
	TATCA	ATGAT	CATGT	GCATT	CAGTC	CTTTG
	TTGTT	TGAAC	TTTAC	GGCAA	GACTA	ACGAC
	ACCAT	CAACA	AATAC	GACGT	ATAAA	GTAGC
	GAGGC	AAACT	CTCTC	GCTCA	CGTGC	ATCTA
45	GGGAT	TTGCA	ACGGA	AGTAA		

Group 3:64:

5	ACGGT	CGGCA	ATACG	CCTTC	AACGC	CGCGC
	CGACG	CGGGT	GTGAA	AGCAA	CTAGA	TCGTA
	GAACT	TGTGC	GCCCC	TTCTT	TGCCT	TCAAG
	CCTGG	TAAGG	TCCTC	ATCAC	CACTT	ACATT
	GTTGT	TTAGC	CACAG	GCATA	AAATC	CTAAT
	GCAGC	GAGAC	GGTAG	TGACA	AATAT	TATTC
	TTGCG	GCTAT	TGGAT	GATGG	ATGTT	TACCA
10	ATTTG	TCTCG	CTTTA	ATTGA	CTCCC	AGGCC
	GTCGG	GGTTA	AAGCG	GGGCT	TCCGT	AGCTG
	CATCC	AGAGG	GAGTG	GTGTC	AAAAA	CCCAA
	CGATT	AGTAC	TAGGA	TGGTG		

Group 4:64:

20	TAAAT	CGTAT	AAAAG	CAAGA	ACGAT	GAACA
	TTCGC	AACGG	TATGA	ATCAA	TCCAA	CGCGT
	CAGAA	AACCT	GCGCA	GAGGG	AATGT	ATGCC
	CTGGT	ACTCA	GAGTT	AAGTA	CAGCC	TGTAC
	CAATC	AGCTC	GCAAC	ATGGA	TAGCA	TCTCT
	GCCGT	CTACG	CTTAC	GTTAG	CCTGC	CGTCG
25	TTCCG	TCGGG	GACAC	ACATG	GGCGA	AGACT
	GGATA	GTCCT	ATAAC	CCATT	CACTG	GATTC
	CGCTA	CTTGA	ATTTT	GGGAG	CCGAG	CATCT
	TGAGC	GGTCA	GTAGG	AGTGG	TCACC	CGCCC
	GCTTT	TTATT	TGTTG	TTGTG		

Group 5:64:

35	GGGCC	TCTAG	ACCGA	GAAAT	CATAG	CCTCC
	GTTAC	AACAA	TGCGC	CGGAA	ATGAA	TAAAA
	ATAAG	CGCTT	ACGCA	ACTGT	TCCAT	AAGTG
	CTTCG	CTGGG	AATCG	CAGCA	TTCTG	GCTAA
	TGGTA	CCCCG	CTATA	AGCGG	GAACG	CACGG
	TGTAT	GCCGC	TACCT	TACTA	TAGAC	GTGTT
	AGATA	GACCC	TAGGT	AAGGC	ACACC	TTATC
40	TCATG	CCAAC	GTCGA	GCGTG	GTACA	CCTTA
	CCGTC	ATTTT	GATTA	CATTC	CTGCT	CGAGC
	TGACT	AGTTC	GGAGT	CCAGT	AGGAC	GTCAG
	GGTGG	GATCT	ATCCC	TTTGA		

Group 6:64:

AGGCT	CATAT	GCCTA	GAAAC	TGATT	ACAGC
TCGTC	CAGAC	CCAAG	CGCAA	CAATA	CTCTG
CGGCG	GCCAG	AACGA	GGCCC	CTACT	ACTTC
CTCGC	GCGCG	TACCG	AGCAC	TGTAA	TGCGT
TTGAA	ATAGA	TTAGG	TAAAG	ACTAA	GAAGG
AAGCC	TATGC	TGTCG	CCCCC	TAGCT	AGATG
TATTA	TTTAT	CGTGT	GTCAT	AGTTT	AAAAT
CCGGT	TCGAT	ATTCT	GGACA	GGGTA	GAGGT
CGAAC	GCATC	GCTGA	GTGAG	CCTCA	TCACT
AGGAG	GATCC	GTTGG	TTCCA	CGGGA	ACCTT
CCTTG	CTTTC	CTGTT	TGGGC		

Group 7:64:

TCCGG	CGGGC	AAAAC	GGAAG	GACAA	TGCAC
GTCTC	CAATT	AGTGT	GCAGT	GGCCG	GCGAA
CGTTC	TGGCA	AGTAG	TTAAT	CGACT	CTTCA
AACTG	ACTTT	ACGGC	CTAAC	CGTAA	GACCT
ACCCC	ATAGG	CTTAG	TACAG	TCGGT	CACGC
GATAC	CTCGT	CATTA	TGAGA	AGACG	GTGGG
CCGTG	GTATA	GATTG	GGTGA	TAGTT	GGGTC
ATGTA	TCTAC	CAGCG	TCACA	TAAGC	AAGGA
ATCAT	TTGCC	ATTCT	GTACC	TCCTA	TGTTT
CGGAT	TTATG	TATCT	CCTGA	ACATA	TCGAG
GCGCT	TTGGA	CCAGG	AGCCA		

Group 8:64:

TTTTC	GCCCA	ATATC	GGAAA	GTTGA	CAGTA
AGTCC	CTGAC	TCACG	ACCAC	CGATC	TGAAT
AAAGA	CGTTA	CACAT	CCTCT	GATGC	CTAAG
CTACA	TATAA	GCGAC	GGGGG	CTCGA	GGCGC
GTCTT	ATTAT	TAATG	AGGAT	AATCA	TCTGT
CACCC	AACCG	AATAG	CGGCT	GAGAG	GTGTA
CCGAA	GTTCG	ACGCT	CCGCG	GGTTT	AAATT
AACTC	TCCTT	ATCGT	TTCAA	ACTTG	ATGGC
TCGGA	CCCTA	TAGCC	TGCCA	TTGGG	TATTT
GCATG	AGAAG	CGCAG	CAAGG	TGGAC	GAGCT
CCAGC	ACAAA	GCCGG	GTACT		

Group 9:64:

5	TAGTA	TATCC	GTAAC	ACGTT	TTTAA	CTTGT
	ATACA	CACAA	AGGAA	ATAGC	TTACT	CACCT
	CATCG	TTCGT	GCTTA	AACCA	CGCTG	TAGAG
	CCCTT	GCCGA	AATTT	AGTCT	GCGCC	TCGCA
	ATAAT	TAAAC	CTGTA	CGACC	TACGG	GGCGG
	CCGGC	GATAT	CAGGT	CCAAA	TGGTC	TTCCC
	ATCTC	AGGGC	GAATG	TGTCA	GTGAT	GGCCT
10	AGATT	ATGCG	ACTGA	TCATT	GAAGT	GGGTT
	GCCAC	ACTAC	TCTGG	ACCCG	CGTAC	CTCAG
	AAAGG	CATGA	TTTTG	GACTC	GTTGC	TGCAT
	GCTAG	GGACG	TGAGG	GTGGA		

Group 10:64:

15	CCACG	GCAGA	AACGT	GAGAT	GGGCA	CGTTG
	CCGTA	TGATA	GCCTG	TCCGA	AAGCA	GAATA
20	ATTCA	CGAGG	TGGGA	GGCTT	TGAAG	TGTCC
	CCGCT	GCTGT	TAACT	ATCAG	TTCCT	CTCTA
	TTACC	GGAAC	TCGCG	GTTAA	ATGAC	GATCG
	GCAAT	GTGCT	ACTAG	AGGGT	AGCCG	CGCCA
25	TTTGG	ATGTG	CTGCC	TCTTT	CATGC	AAATG
	TCTCA	ACACA	AGTGA	AGTAT	GTCAC	ACATC
	GACGC	GGTTC	ATAGT	TACTG	CTGGA	GACCA
	AGAGC	ACGGG	CAAAA	GTACG	CGCAT	TCGAC
	TATAT	CTATT	GAGTC	CCTAC		

Group 11:64:

30	GAACC	AGCCT	AACAT	CACGT	GGGGC	CTCCA
	GCTCG	ACAAG	GTCTG	GGCTA	TGTAG	ATATT
35	TCGTT	CCACT	GCCAT	ACCTA	CGCAC	TAATA
	TGGCG	TTCGG	TACTC	TTGTC	AGGTC	TCCCA
	CAGCT	GTTCC	ATTTA	GCGGA	GGAAT	TTTCT
	CAAAC	ATCGC	GAGCG	TGTGT	TCAAC	TTCAT
40	TGATC	AGAGT	ACCGG	CGAGA	GCTTC	CAGTG
	TTAAA	TACGA	CCGCC	ATTAC	AGACA	GGTAA
	CGTGG	GACTT	CGGTT	GATGT	GCAGG	AATTG
	TAGAT	AAGAA	CATCA	ATGCA	CCCTC	ATGGT
	GTGAC	ACTGC	CTGAG	CTATG		

Group 12:64:

TGCTT	GAGCA	ATATG	TTACA	GGATC	ACACG
CTCAT	CTGTC	AGAAT	TATTG	TTTTT	GCAAA
ATTAA	TACGT	GCCCT	AAGAC	ACCCA	GTCTA
CTAAA	AGTCG	ACCTC	CGCGA	GGTAT	CGAGT
CCTAG	GTCCC	TTCAC	GTGCG	TGGCC	TCGCT
TGTTC	TCAAT	GATGA	AGCTA	GGCAC	CTTCT
GCGGT	ACGAA	ATCGG	CCGGG	TGGAA	TGTGG
CGTTT	AAGGG	GAAAG	GAAGC	AAATA	GGGTG
CACCG	TCAGC	CCATG	GCTCC	CTTGC	CACTC
AATCC	TCCAG	AAGTT	CATAA	CAACC	TCTTA
TGACG	CGGAG	GTAGT	ACAGA		

Group 13:64:

TTTGT	ATTAG	TAAGA	TCGAA	CGACA	ACGCC
AGAAA	GTAGA	AAGTC	CCTAT	GCGTA	CGTCC
ACCGT	TCTTG	GAATT	TCCCC	ATCCG	GCTGC
GTCAA	GATAA	GGTCG	TTCTC	TGGCT	AGGGG
GGGAC	CCATC	GTGGT	GTTTT	AACTA	TCGGC
AAACC	GGCCA	TGAGT	AATGA	CTCCT	GTGCC
CAGGC	TATAC	GACGG	AGGTT	AGCCC	TACAT
CAGAT	GCACG	GTGTG	GGCAT	CGCGG	TTTCA
CCCGA	AATCT	TGCAG	CTGAA	CGGTG	ACACT
CCCAC	TAGCG	CTAGG	CAAAG	TTAAC	ATTGC
GGAGC	ACCTG	TGTTA	GCTCT		

Group 14:64:

CGGTC	GCTGG	GTCGC	TTTCC	TTGTA	CACAC
GCGTT	ACAAC	CGTCT	ACTCT	CGAAA	AGTTG
CTTGG	AGCTT	ACGTA	AGTGC	TGGAG	AGTCA
CTCCG	TTAGT	GTAAT	TTACG	ACGCG	ACAGT
TCATC	ATCGA	CCCAT	CCCGC	GCAAG	TGCCC
TTCAG	GAAGA	AAACG	TAACA	CAAAT	ATGAG
AATAA	ATATA	TGCGA	GGCAG	GCTAC	CTATC
CCGGA	CACCA	GAGAA	CTGCA	CAGGG	GGGGA
TACTT	GGTGT	CATTG	GGACC	GACTG	ATGCT
GAGCC	TATGG	TCCTG	TAGGC	AAGGT	AATTC
GTTTA	CTGAT	GGATT	TCTAA		

SECRET

10

A38 -

APPENDIX 4

Simulation Results

r300.0.0.out

5

```
Using pool D16
Using sequence r300
```

	True	Signal:	fp=CTCGA	pool=7
10	True	Signal:	fp=CTACG	pool=1
	True	Signal:	fp=CTACG	pool=2
	True	Signal:	fp=GTACC	pool=0
	True	Signal:	fp=ATCGC	pool=1
	True	Signal:	fp=GAATG	pool=15
15	True	Signal:	fp=ATCGG	pool=13
	True	Signal:	fp=GTCGC	pool=13
	True	Signal:	fp=ACCCA	pool=14
	True	Signal:	fp=CTGGG	pool=10
	True	Signal:	fp=CAATT	pool=3
20	True	Signal:	fp=GACAA	pool=1
	True	Signal:	fp=TACTA	pool=3
	True	Signal:	fp=ACCCC	pool=6
	True	Signal:	fp=AGACA	pool=10
	True	Signal:	fp=TTCCA	pool=8
25	True	Signal:	fp=TTCCA	pool=4
	True	Signal:	fp=ACGCA	pool=8
	True	Signal:	fp=GACAC	pool=2
	True	Signal:	fp=CGACA	pool=10
	True	Signal:	fp=CGACA	pool=11
30	True	Signal:	fp=CTACT	pool=10
	True	Signal:	fp=CCCCC	pool=9
	True	Signal:	fp=CCCCC	pool=14
	True	Signal:	fp=TTCCC	pool=12
	True	Signal:	fp=GCCCA	pool=1
35	True	Signal:	fp=GAGAA	pool=8
	True	Signal:	fp=CCAGC	pool=5
	True	Signal:	fp=CAGAG	pool=3
	True	Signal:	fp=GCAGA	pool=1
	True	Signal:	fp=GCAGC	pool=12
40	True	Signal:	fp=CGCGA	pool=3
	True	Signal:	fp=AGCGC	pool=0
	True	Signal:	fp=GGACC	pool=1
	True	Signal:	fp=CCAGG	pool=7
	True	Signal:	fp=TTAGG	pool=1
45	True	Signal:	fp=GAGAG	pool=1
	True	Signal:	fp=TAAAA	pool=11
	True	Signal:	fp=AGCGG	pool=4
	True	Signal:	fp=ACTAA	pool=15

000010 000000 000000 000000 000000

	True Signal: fp=TTAAC pool=2
	True Signal: fp=AAAGC pool=1
	True Signal: fp=AAAGC pool=6
	True Signal: fp=AAGCC pool=8
5	True Signal: fp=CTCAT pool=8
	True Signal: fp=AGATT pool=12
	True Signal: fp=CAGCC pool=10
	True Signal: fp=CGCAC pool=4
	True Signal: fp=AAAGG pool=1
10	True Signal: fp=GACCC pool=9
	True Signal: fp=CCCTT pool=1
	True Signal: fp=CGATT pool=11
	True Signal: fp=GAAGC pool=5
	True Signal: fp=TCATG pool=1
15	True Signal: fp=AGGAC pool=15
	True Signal: fp=TGCTA pool=4
	True Signal: fp=GAAGG pool=10
	True Signal: fp=AATAA pool=2
	True Signal: fp=TGCTG pool=9
20	True Signal: fp=GGCAG pool=1
	True Signal: fp=GAGCG pool=3
	True Signal: fp=CTTGG pool=1
	True Signal: fp=ACAAT pool=6
	True Signal: fp=ACTCA pool=7
25	True Signal: fp=TCCAC pool=10
	True Signal: fp=AATAG pool=13
	True Signal: fp=GATAA pool=1
	True Signal: fp=TACGA pool=6
	True Signal: fp=TATTC pool=2
30	True Signal: fp=CCTCC pool=3
	True Signal: fp=TAACG pool=14
	True Signal: fp=AAGCT pool=12
	True Signal: fp=AAGCT pool=5
	True Signal: fp=ACTCG pool=15
35	True Signal: fp=CAGCT pool=9
	True Signal: fp=TCCAG pool=8
	True Signal: fp=TCCAG pool=2
	True Signal: fp=CGCAT pool=11
	True Signal: fp=TCGAC pool=9
40	True Signal: fp=TCGAC pool=13
	True Signal: fp=GCTCA pool=5
	True Signal: fp=AGGAT pool=8
	True Signal: fp=TAGGA pool=15
	True Signal: fp=AGTGA pool=14
45	True Signal: fp=TAGGC pool=13
	True Signal: fp=TACGG pool=7
	True Signal: fp=TAGGG pool=13
	True Signal: fp=AATAT pool=13

True Signal: fp=GGTGC pool=1
 True Signal: fp=GGTGC pool=4
 True Signal: fp=TCCAT pool=9
 True Signal: fp=TGAAT pool=10
 5 True Signal: fp=TATTT pool=6
 True Signal: fp=TGTCC pool=10
 True Signal: fp=AACTA pool=11
 True Signal: fp=AACTA pool=3
 True Signal: fp=CACTC pool=7
 10 True Signal: fp=CTCCA pool=6
 True Signal: fp=AAGTA pool=7
 True Signal: fp=CAGTA pool=8
 True Signal: fp=GACTC pool=14
 True Signal: fp=GTCCA pool=3
 15 True Signal: fp=CTGCA pool=11
 True Signal: fp=ATAGG pool=12
 True Signal: fp=GTAGA pool=8
 True Signal: fp=GTAGA pool=9
 True Signal: fp=TGTCT pool=0
 20 True Signal: fp=CAGTG pool=15
 True Signal: fp=GTAGC pool=14
 True Signal: fp=GTGCC pool=10
 True Signal: fp=CAAAC pool=11
 True Signal: fp=GTAGG pool=3
 25 True Signal: fp=AAAAG pool=0
 True Signal: fp=AAAAG pool=2
 True Signal: fp=ACACG pool=5
 True Signal: fp=GAAAG pool=14
 True Signal: fp=CCCGA pool=15
 30 True Signal: fp=AGCCC pool=10
 True Signal: fp=AGAGA pool=13
 True Signal: fp=ATGCT pool=6
 True Signal: fp=AGAGC pool=14
 True Signal: fp=GCTTA pool=9
 35 True Signal: fp=AGGCC pool=12
 True Signal: fp=CGGCA pool=10
 True Signal: fp=GCCGA pool=7
 True Signal: fp=CCTTG pool=2
 True Signal: fp=GCTTC pool=5
 40 True Signal: fp=TTCGC pool=10
 True Signal: fp=GCACG pool=10
 True Signal: fp=TTGGC pool=12
 True Signal: fp=GTGCT pool=9
 True Signal: fp=ACGGG pool=11
 45 True Signal: fp=ACGGG pool=3
 True Signal: fp=GCGGC pool=11
 True Signal: fp=TAGAA pool=15
 True Signal: fp=CCACT pool=13

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5 True Signal: fp=GGGCG pool=2
True Signal: fp=TCAGA pool=9
True Signal: fp=CGTAA pool=6
- True Signal: fp=TAGAC pool=11
True Signal: fp=CTTAT pool=13
True Signal: fp=AGCCT pool=0
True Signal: fp=CGTAC pool=7
True Signal: fp=CATCG pool=7
True Signal: fp=TCGCA pool=7
10 True Signal: fp=TCCCG pool=11
True Signal: fp=AGTAG pool=9
True Signal: fp=AGGCT pool=10
True Signal: fp=GGCCT pool=8
True Signal: fp=TCGCG pool=5
15 True Signal: fp=GGTAG pool=10 —
True Signal: fp=GGTAG pool=3 —
True Signal: fp=GGGCT pool=8
True Signal: fp=TGGGG pool=1
True Signal: fp=AGTAT pool=0
20 True Signal: fp=ATGTC pool=9
True Signal: fp=TGACT pool=9
True Signal: fp=CTGTC pool=11
True Signal: fp=GTCTC pool=4
True Signal: fp=CTGTG pool=3
25 True Signal: fp=CTAAA pool=14
X True Signal: fp=ACATC pool=13
True Signal: fp=GTAAA pool=13
True Signal: fp=ATAAG pool=13
True Signal: fp=AGCTA pool=4
30 True Signal: fp=GTCTT pool=13
True Signal: fp=AGCTG pool=3
True Signal: fp=AGGTC pool=1
True Signal: fp=CGCTG pool=12
True Signal: fp=GGCTC pool=14
35 True Signal: fp=AGGTG pool=8
True Signal: fp=GGGTA pool=10
True Signal: fp=GGGTA pool=15
True Signal: fp=GGCTG pool=2
True Signal: fp=GGGTC pool=10
40 True Signal: fp=CGAAA pool=3
True Signal: fp=ATTCA pool=13
True Signal: fp=ATTCA pool=6
True Signal: fp=TTCAA pool=9
True Signal: fp=TTCAA pool=12
45 True Signal: fp=AACGA pool=11
True Signal: fp=ACGAA pool=13
True Signal: fp=ATTCC pool=2
True Signal: fp=CCGAA pool=12

Index	Signal	fp	pool
5	True	Signal: fp=CCGAA	pool=14
	True	Signal: fp=CATTC	pool=13
	True	Signal: fp=CCATT	pool=11
	True	Signal: fp=GGGTG	pool=6
	True	Signal: fp=AGAAG	pool=0
10	True	Signal: fp=CCCAG	pool=3
	True	Signal: fp=CCCAG	pool=5
	True	Signal: fp=CACGC	pool=10
	True	Signal: fp=CTTCC	pool=14
	True	Signal: fp=CTTCC	pool=6
15	True	Signal: fp=TTATT	pool=0
	True	Signal: fp=GATTC	pool=12
	True	Signal: fp=GATTC	pool=14
	True	Signal: fp=CAGGA	pool=15
	True	Signal: fp=GCATT	pool=15
20	True	Signal: fp=AGCTT	pool=4
	True	Signal: fp=ATTCG	pool=9
	True	Signal: fp=ATTCG	pool=5
	True	Signal: fp=CGAAG	pool=14
	True	Signal: fp=CACGG	pool=9
25	True	Signal: fp=AAGGG	pool=13
	True	Signal: fp=GAGGC	pool=11
	True	Signal: fp=GGCTT	pool=11
	True	Signal: fp=AAACT	pool=4
	True	Signal: fp=TCAAA	pool=4
30	True	Signal: fp=TCAAC	pool=5
	True	Signal: fp=CAACT	pool=4
	True	Signal: fp=AGAAT	pool=10
	True	Signal: fp=AATTT	pool=8
	True	Signal: fp=TACCC	pool=5
35	True	Signal: fp=ACGAT	pool=1
	True	Signal: fp=CGAAT	pool=12
	True	Signal: fp=TAAGG	pool=1
	True	Signal: fp=AAGGT	pool=9
	True	Signal: fp=AAGGT	pool=12
40	True	Signal: fp=GCTGA	pool=12
	True	Signal: fp=TGCAG	pool=5
	True	Signal: fp=TAGCG	pool=5
	True	Signal: fp=GCGAT	pool=14
	True	Signal: fp=GCTGC	pool=10
45	True	Signal: fp=GCTGG	pool=1
	True	Signal: fp=GGTCG	pool=0
	True	Signal: fp=TCAAT	pool=4
	True	Signal: fp=TAAGT	pool=2
	True	Signal: fp=CCTGT	pool=5
	True	Signal: fp=TCTCG	pool=12
	True	Signal: fp=TGTGA	pool=9
	True	Signal: fp=GCTGT	pool=2

True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0
True Signal: fp=GAATA pool=15
True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12

NOTE 700 NON-TRUE SIGNALS NOT SHOWN

GGTAGGGGTA GACATCGCGT AAAAGGGGCG TACCCAGGAC CCCCTTGGC TCAATAAGTA
GCGCTGGGGT GCTACTACGG GTCTCGACAC GCATTCAACT AAAAGCTTCC ATTCGCACGG
GCTTATTTAA CGAAGGTCGC GATAAGGTGC CGAATAGGCT GCAGAGCGGC AGCCTGTCCA
GTGAATGCTG TGAGGCCTCC AGCTGACTCA TGAGAGAAGC CCAGTATTCA AACTACGATT
CCACTCGACA ATTTAGGATG TCTTCCCGAA AGCTATCGGG TAGAATATCA GATTCGTTTA

DotsOn=286

GGTAGGGGTA GACATCGCGT AAAAGGGGCG TACCCAGGAC CCCCTTGGC TCAATAAGTA
GCGCTGGGGT GCTACTACGG GTCTCGACAC GCATTCAACT AAAAGCTTCC ATTCGCACGG
GCTTATTTAA CGAAGGTCGC GATAAGGTGC CGAATAGGCT GCAGAGCGGC AGCCTGTCCA
GTGAATGCTG TGAGGCCTCC AGCTGACTCA TGAGAGAAGC CCAGTATTCA AACTACGATT
CCACTCGACA ATTTAGGATG TCTTCCCGAA AGCTATCGGG TAGAATATCA GATTCGTTTG

DotsOn=286

GGTAGGGGTA GACATCGCGT AAAAGGGGCG TACCCAGGAC CCCCTTGGC TCAATAAGTA
GCGCTGGGGT GCTACTACGG GTCTCGACAC GCATTCAACT AAAAGCTTCC ATTCGCACGG
GCTTATTTAA CGAAGGTCGC GATAAGGTGC CGAATAGGCT GCAGAGCGGC AGCCTGTCCA
GTGAATGCTG TGAGGCCTCC AGCTGACTCA TGAGAGAAGC CCAGTATTCA AACTACGATT
CCACTCGACA ATTTAGGATG TCTTCCCGAA AGCTATCGGG TAGAATATCA GATTCGTTT

DotsOn=286

GTAGGGGTA ACATCGCGTA AAAGGGGCGT ACCCAGGACC CCCCTTGGCT CAATAAGTAG
CGCTGGGGTG CTACTACGGG TCTCGACACG CATTCAACTA AAAGCTTCCA TTCGCACGGG
CTTATTTAAC GAAGGTCGCG ATAAGGTGCC GAATAGGCTG CAGAGCGGCA GCCTGTCCAG
TGAATGCTGT GAGGCCTCCA GCTGACTCAT GAGAGAAGCC CAGTATTCAA ACTACGATTC
CACTCGACAA TTTAGGATGT CTTCCCGAAA GCTATCGGGT AGAATATCAG ATTCGTTTAA

True solution DotsOn=286

GTAGGGGTA ACATCGCGTA AAAGGGGCGT ACCCAGGACC CCCCTTGGCT CAATAAGTAG
CGCTGGGGTG CTACTACGGG TCTCGACACG CATTCAACTA AAAGCTTCCA TTCGCACGGG
CTTATTTAAC GAAGGTCGCG ATAAGGTGCC GAATAGGCTG CAGAGCGGCA GCCTGTCCAG
TGAATGCTGT GAGGCCTCCA GCTGACTCAT GAGAGAAGCC CAGTATTCAA ACTACGATTC
CACTCGACAA TTTAGGATGT CTTCCCGAAA GCTATCGGGT AGAATATCAG ATTCGTTTTG

DotsOn=286

Solutions: 5

r300.100.0.out

Using pool D16

Using sequence r300

5

True Signal: fp=CTCGA pool=7

True Signal: fp=CTACG pool=1

True Signal: fp=CTACG pool=2

True Signal: fp=GTACC pool=0

10

True Signal: fp=ATCGC pool=1

True Signal: fp=GAATG pool=15

True Signal: fp=ATCGG pool=13

True Signal: fp=GTCGC pool=13

True Signal: fp=ACCCA pool=14

15

True Signal: fp=CTGGG pool=10

True Signal: fp=CAATT pool=3

True Signal: fp=GACAA pool=1

True Signal: fp=TACTA pool=3

True Signal: fp=ACCCC pool=6

20

True Signal: fp=AGACA pool=10

True Signal: fp=TTCCA pool=8

True Signal: fp=TTCCA pool=4

True Signal: fp=ACGCA pool=8

True Signal: fp=GACAC pool=2

25

True Signal: fp=CGACA pool=10

True Signal: fp=CGACA pool=11

True Signal: fp=CTACT pool=10

True Signal: fp=CCCCC pool=9

True Signal: fp=CCCCC pool=14

30

True Signal: fp=TTCCC pool=12

True Signal: fp=GCCCC pool=1

True Signal: fp=GAGAA pool=8

True Signal: fp=CCAGC pool=5

True Signal: fp=CAGAG pool=3

35

True Signal: fp=GCAGA pool=1

True Signal: fp=GCAGC pool=12

True Signal: fp=CGCGA pool=3

True Signal: fp=AGCGC pool=0

True Signal: fp=GGACC pool=1

40

True Signal: fp=CCAGG pool=7

True Signal: fp=TTAGG pool=1

True Signal: fp=GAGAG pool=1

True Signal: fp=TAAAA pool=11

True Signal: fp=AGCGG pool=4

45

True Signal: fp=ACTAA pool=15

True Signal: fp=CGGGC pool=4

True Signal: fp=ACTAC pool=4

True Signal: fp=ACTAC pool=7

5	True Signal: fp=AGGGG pool=9
	True Signal: fp=AGGGG pool=5
	True Signal: fp=TTTAA pool=15
	True Signal: fp=GGGGC pool=7
	True Signal: fp=CAGAT pool=11
10	True Signal: fp=CATGA pool=14
	True Signal: fp=AATGC pool=1
	True Signal: fp=CCCCT pool=13
	True Signal: fp=GACAT pool=4
	True Signal: fp=TCTTC pool=8
15	True Signal: fp=CCAGT pool=10
	True Signal: fp=CCAGT pool=9
	True Signal: fp=GCTAC pool=9
	True Signal: fp=TTTAG pool=11
	True Signal: fp=TGAGA pool=12
20	True Signal: fp=TGCCG pool=8
	True Signal: fp=GCGCT pool=15
	True Signal: fp=CGCGT pool=4
	True Signal: fp=TGAGG pool=7
	True Signal: fp=TCGGG pool=1
25	True Signal: fp=CGGGT pool=8
	True Signal: fp=CGGGT pool=12
	True Signal: fp=GGCGT pool=12
	True Signal: fp=TATCA pool=4
	True Signal: fp=ATATC pool=2
30	True Signal: fp=CTATC pool=6
	True Signal: fp=GGGGT pool=11
	True Signal: fp=GGGGT pool=14
	True Signal: fp=TATCG pool=3
	True Signal: fp=GCTAT pool=3
35	True Signal: fp=GATGT pool=0
	True Signal: fp=TGGCT pool=6
	True Signal: fp=CTCAA pool=15
	True Signal: fp=ATCAG pool=6
	True Signal: fp=CGATA pool=8
40	True Signal: fp=CTGAC pool=5
	True Signal: fp=GTATT pool=11
	True Signal: fp=ATGAG pool=8
	True Signal: fp=GCCTC pool=0
	True Signal: fp=GTGAA pool=2
45	True Signal: fp=GCGTA pool=0
	True Signal: fp=GCGTA pool=9
	True Signal: fp=GCCTG pool=12
	True Signal: fp=GGATG pool=1
	True Signal: fp=GTGAG pool=0
	True Signal: fp=TTAAC pool=2
	True Signal: fp=AAAGC pool=1
	True Signal: fp=AAAGC pool=6

5	True Signal: fp=AAGCC pool=8
	True Signal: fp=CTCAT pool=8
	True Signal: fp=AGATT pool=12
	True Signal: fp=CAGCC pool=10
	True Signal: fp=CGCAC pool=4
10	True Signal: fp=AAAGG pool=1
	True Signal: fp=GACCC pool=9
	True Signal: fp=CCCTT pool=1
	True Signal: fp=CGATT pool=11
	True Signal: fp=GAAGC pool=5
15	True Signal: fp=TCATG pool=1
	True Signal: fp=AGGAC pool=15
	True Signal: fp=TGCTA pool=4
	True Signal: fp=GAAGG pool=10
	True Signal: fp=AATAA pool=2
20	True Signal: fp=TGCTG pool=9
	True Signal: fp=GGCAG pool=1
	True Signal: fp=GAGCG pool=3
	True Signal: fp=CTTGG pool=1
	True Signal: fp=ACAAT pool=6
25	True Signal: fp=ACTCA pool=7
	True Signal: fp=TCCAC pool=10
	True Signal: fp=AATAG pool=13
	True Signal: fp=GATAA pool=1
	True Signal: fp=TACGA pool=6
30	True Signal: fp=TATTC pool=2
	True Signal: fp=CCTCC pool=3
	True Signal: fp=TAACG pool=14
	True Signal: fp=AAGCT pool=12
	True Signal: fp=AAGCT pool=5
35	True Signal: fp=ACTCG pool=15
	True Signal: fp=CAGCT pool=9
	True Signal: fp=TCCAG pool=8
	True Signal: fp=TCCAG pool=2
	True Signal: fp=CGCAT pool=11
40	True Signal: fp=TCGAC pool=9
	True Signal: fp=TCGAC pool=13
	True Signal: fp=GCTCA pool=5
	True Signal: fp=AGGAT pool=8
	True Signal: fp=TAGGA pool=15
45	True Signal: fp=AGTGA pool=14
	True Signal: fp=TAGGC pool=13
	True Signal: fp=TACGG pool=7
	True Signal: fp=TAGGG pool=13
	True Signal: fp=AATAT pool=13
	True Signal: fp=GGTGC pool=1
	True Signal: fp=GGTGC pool=4
	True Signal: fp=TCCAT pool=9

	True Signal: fp=TGAAT	pool=10
	True Signal: fp=TATTT	pool=6
	True Signal: fp=TGTCC	pool=10
	True Signal: fp=AACTA	pool=11
5	True Signal: fp=AACTA	pool=3
	True Signal: fp=CACTC	pool=7
	True Signal: fp=CTCCA	pool=6
	True Signal: fp=AAGTA	pool=7
	True Signal: fp=CAGTA	pool=8
10	True Signal: fp=GACTC	pool=14
	True Signal: fp=GTCCA	pool=3
	True Signal: fp=CTGCA	pool=11
	True Signal: fp=ATAGG	pool=12
	True Signal: fp=GTAGA	pool=8
15	True Signal: fp=GTAGA	pool=9
	True Signal: fp=TGTCT	pool=0
	True Signal: fp=CAGTG	pool=15
	True Signal: fp=GTAGC	pool=14
	True Signal: fp=GTGCC	pool=10
20	True Signal: fp=CAAAC	pool=11
	True Signal: fp=GTAGG	pool=3
	True Signal: fp=AAAAG	pool=0
	True Signal: fp=AAAAG	pool=2
	True Signal: fp=ACACG	pool=5
25	True Signal: fp=GAAAG	pool=14
	True Signal: fp=CCCGA	pool=15
	True Signal: fp=AGCCC	pool=10
	True Signal: fp=AGAGA	pool=13
	True Signal: fp=ATGCT	pool=6
30	True Signal: fp=AGAGC	pool=14
	True Signal: fp=GCTTA	pool=9
	True Signal: fp=AGGCC	pool=12
	True Signal: fp=CGGCA	pool=10
	True Signal: fp=GCCGA	pool=7
35	True Signal: fp=CCTTG	pool=2
	True Signal: fp=GCTTC	pool=5
	True Signal: fp=TTTCG	pool=10
	True Signal: fp=GCACG	pool=10
	True Signal: fp=TTGGC	pool=12
40	True Signal: fp=GTGCT	pool=9
	True Signal: fp=ACGGT	pool=11
	True Signal: fp=ACGGG	pool=3
	True Signal: fp=CGGGC	pool=11
	True Signal: fp=TAGAA	pool=15
45	True Signal: fp=CCACT	pool=13
	True Signal: fp=GGGCG	pool=2
	True Signal: fp=TCAGA	pool=9
	True Signal: fp=CGTAA	pool=6

Index	Signal	Pool
5	True Signal: fp=TAGAC	pool=11
	True Signal: fp=CTTAT	pool=13
	True Signal: fp=AGCCT	pool=0
	True Signal: fp=CGTAC	pool=7
	True Signal: fp=CATCG	pool=7
10	True Signal: fp=TCGCA	pool=7
	True Signal: fp=TCCCG	pool=11
	True Signal: fp=AGTAG	pool=9
	True Signal: fp=AGGCT	pool=10
	True Signal: fp=GGCCT	pool=8
15	True Signal: fp=TCGCG	pool=5
	True Signal: fp=GGTAG	pool=10
	True Signal: fp=GGTAG	pool=3
	True Signal: fp=GGGCT	pool=8
	True Signal: fp=TGGGG	pool=1
20	True Signal: fp=AGTAT	pool=0
	True Signal: fp=ATGTC	pool=9
	True Signal: fp=TGACT	pool=9
	True Signal: fp=CTGTC	pool=11
	True Signal: fp=GTCTC	pool=4
25	True Signal: fp=CTGTG	pool=3
	True Signal: fp=CTAAA	pool=14
	True Signal: fp=ACATC	pool=13
	True Signal: fp=GTAAA	pool=13
	True Signal: fp=ATAAG	pool=13
30	True Signal: fp=AGCTA	pool=4
	True Signal: fp=GTCTT	pool=13
	True Signal: fp=AGCTG	pool=3
	True Signal: fp=AGGTC	pool=1
	True Signal: fp=CGCTG	pool=12
35	True Signal: fp=GGCTC	pool=14
	True Signal: fp=AGGTG	pool=8
	True Signal: fp=GGGTA	pool=10
	True Signal: fp=GGGTA	pool=15
	True Signal: fp=GGCTG	pool=2
40	True Signal: fp=GGGTC	pool=10
	True Signal: fp=CGAAA	pool=3
	True Signal: fp=ATTCA	pool=13
	True Signal: fp=ATTCA	pool=6
	True Signal: fp=TTCAA	pool=9
45	True Signal: fp=TTCAA	pool=12
	True Signal: fp=AACGA	pool=11
	True Signal: fp=ACGAA	pool=13
	True Signal: fp=ATTCC	pool=2
	True Signal: fp=CCGAA	pool=12
	True Signal: fp=CCGAA	pool=14
	True Signal: fp=CATTC	pool=13
	True Signal: fp=CCATT	pool=11

True Signal: fp=GGGTG pool=6
True Signal: fp=AGAAG pool=0
True Signal: fp=CCCAG pool=3
True Signal: fp=CCCAG pool=5
True Signal: fp=CACGC pool=10
True Signal: fp=CTTCC pool=14
True Signal: fp=CTTCC pool=6
True Signal: fp=TTATT pool=0
True Signal: fp=GATTC pool=12
True Signal: fp=GATTC pool=14
True Signal: fp=CAGGA pool=15
True Signal: fp=GCATT pool=15
True Signal: fp=AGCTT pool=4
True Signal: fp=ATTCG pool=9
True Signal: fp=ATTCG pool=5
True Signal: fp=CGAAG pool=14
True Signal: fp=CACGG pool=9
True Signal: fp=AAGGG pool=13
True Signal: fp=GAGGC pool=11
True Signal: fp=GGCTT pool=11
True Signal: fp=AAACT pool=4
True Signal: fp=TCAAA pool=4
True Signal: fp=TCAAC pool=5
True Signal: fp=CAACT pool=4
True Signal: fp=AGAAT pool=10
True Signal: fp=AATTT pool=8
True Signal: fp=TACCC pool=5
True Signal: fp=ACGAT pool=1
True Signal: fp=CGAAT pool=12
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True Signal: fp=AAGGT pool=9
True Signal: fp=AAGGT pool=12
True Signal: fp=GCTGA pool=12
True Signal: fp=TGCAG pool=5
True Signal: fp=TACGG pool=5
True Signal: fp=GCGAT pool=14
True Signal: fp=GCTGC pool=10
True Signal: fp=GCTGG pool=1
True Signal: fp=GGTCG pool=0
True Signal: fp=TCAAT pool=4
True Signal: fp=TAAGT pool=2
True Signal: fp=CCTGT pool=5
True Signal: fp=TCTCG pool=12
True Signal: fp=TGTGA pool=9
True Signal: fp=GCTGT pool=2
True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0

False positive	Signal:	fp=GCATA	pool=14
False positive	Signal:	fp=TGGTC	pool=0
False positive	Signal:	fp=AGGTT	pool=11
False positive	Signal:	fp=CATAC	pool=15
False positive	Signal:	fp=TCAGC	pool=10
False positive	Signal:	fp=GGACT	pool=12
False positive	Signal:	fp=TGCTC	pool=13
False positive	Signal:	fp=CCATA	pool=1
False positive	Signal:	fp=AATTA	pool=13
False positive	Signal:	fp=GCGAA	pool=15
False positive	Signal:	fp=ACCGG	pool=11
False positive	Signal:	fp=GTTCA	pool=2
False positive	Signal:	fp=AGTAC	pool=7
False positive	Signal:	fp=GAGTC	pool=6
False positive	Signal:	fp=GTGCT	pool=12
False positive	Signal:	fp=TCACT	pool=9
False positive	Signal:	fp=CTACA	pool=8
False positive	Signal:	fp=GACGA	pool=2
False positive	Signal:	fp=GGTCG	pool=9
False positive	Signal:	fp=CTCAA	pool=15
False positive	Signal:	fp=TCACT	pool=15
False positive	Signal:	fp=AGATC	pool=12
False positive	Signal:	fp=GTCGG	pool=10
False positive	Signal:	fp=GGGGA	pool=5
False positive	Signal:	fp=TGGAG	pool=1
False positive	Signal:	fp=GGAGT	pool=9
False positive	Signal:	fp=TGCCA	pool=7
False positive	Signal:	fp=AAATC	pool=13
False positive	Signal:	fp=ACCGT	pool=9
False positive	Signal:	fp=GACGC	pool=8
False positive	Signal:	fp=TAAGT	pool=4
False positive	Signal:	fp=TGACC	pool=10
False positive	Signal:	fp=GGATC	pool=11
False positive	Signal:	fp=GAAGG	pool=7
False positive	Signal:	fp=CGATT	pool=10
False positive	Signal:	fp=GCTAG	pool=10
False positive	Signal:	fp=GTGGC	pool=12
False positive	Signal:	fp=GAATC	pool=13
False positive	Signal:	fp=CCATG	pool=4
False positive	Signal:	fp=GATCA	pool=10
False positive	Signal:	fp=CAGTA	pool=3
False positive	Signal:	fp=CAACT	pool=4
False positive	Signal:	fp=CGCCA	pool=2
False positive	Signal:	fp=TATAG	pool=1
False positive	Signal:	fp=TACTG	pool=1
False positive	Signal:	fp=AAAGC	pool=4
False positive	Signal:	fp=CGACG	pool=14
False positive	Signal:	fp=GTACT	pool=3

51mers:289
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53mers:284
54mers:285
55mers:283
56mers:282
57mers:282
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98mers:237

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	241mers:80
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	244mers:74
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45	287mers:21
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	289mers:17
	290mers:17

5
10

15

20

25

Solutions: 2

r300.300.0.out

Using pool D16

Using sequence r300

5

True Signal: fp=CTCGA pool=7

True Signal: fp=CTACG pool=1

True Signal: fp=CTACG pool=2

True Signal: fp=GTACC pool=0

10

True Signal: fp=ATCGC pool=1

True Signal: fp=GAATG pool=15

True Signal: fp=ATCGG pool=13

True Signal: fp=GTCGC pool=13

True Signal: fp=ACCCA pool=14

15

True Signal: fp=CTGGG pool=10

True Signal: fp=CAATT pool=3

True Signal: fp=GACAA pool=1

True Signal: fp=TACTA pool=3

True Signal: fp=ACCCC pool=6

20

True Signal: fp=AGACA pool=10

True Signal: fp=TTCCA pool=8

True Signal: fp=TTCCA pool=4

True Signal: fp=ACGCA pool=8

True Signal: fp=GACAC pool=2

25

True Signal: fp=CGACA pool=10

True Signal: fp=CGACA pool=11

True Signal: fp=CTACT pool=10

True Signal: fp=CCCCC pool=9

True Signal: fp=CCCCC pool=14

30

True Signal: fp=TTCCC pool=12

True Signal: fp=GCCCA pool=1

True Signal: fp=GAGAA pool=8

True Signal: fp=CCAGC pool=5

True Signal: fp=CAGAG pool=3

35

True Signal: fp=GCAGA pool=1

True Signal: fp=GCAGC pool=12

True Signal: fp=CGCGA pool=3

True Signal: fp=AGCGC pool=0

True Signal: fp=GGACC pool=1

40

True Signal: fp=CCAGG pool=7

True Signal: fp=TTAGG pool=1

True Signal: fp=GAGAG pool=1

True Signal: fp=TAAAA pool=11

True Signal: fp=AGCGG pool=4

45

True Signal: fp=ACTAA pool=15

True Signal: fp=CGGGC pool=4

True Signal: fp=ACTAC pool=4

True Signal: fp=ACTAC pool=7

True Signal: fp=AGGGG pool=9
True Signal: fp=AGGGG pool=5
True Signal: fp=TTTAA pool=15
True Signal: fp=GGGGC pool=7
True Signal: fp=CAGAT pool=11
True Signal: fp=CATGA pool=14
True Signal: fp=AATGC pool=1
True Signal: fp=CCCCT pool=13
True Signal: fp=GACAT pool=4
True Signal: fp=TCTTC pool=8
True Signal: fp=CCAGT pool=10
True Signal: fp=CCAGT pool=9
True Signal: fp=GCTAC pool=9
True Signal: fp=TTTAG pool=11
True Signal: fp=TGAGA pool=12
True Signal: fp=TGCCG pool=8
True Signal: fp=GCGCT pool=15
True Signal: fp=CGCGT pool=4
True Signal: fp=TGAGG pool=7
True Signal: fp=TCGGG pool=1
True Signal: fp=CGGGT pool=8
True Signal: fp=CGGGT pool=12
True Signal: fp=GGCGT pool=12
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True Signal: fp=CTATC pool=6
True Signal: fp=GGGGT pool=11
True Signal: fp=GGGGT pool=14
True Signal: fp=TATCG pool=3
True Signal: fp=GCTAT pool=3
True Signal: fp=GATGT pool=0
True Signal: fp=TGGCT pool=6
True Signal: fp=CTCAA pool=15
True Signal: fp=ATCAG pool=6
True Signal: fp=CGATA pool=8
True Signal: fp=CTGAC pool=5
True Signal: fp=GTATT pool=11
True Signal: fp=ATGAG pool=8
True Signal: fp=GCCTC pool=0
True Signal: fp=GTGAA pool=2
True Signal: fp=GCGTA pool=0
True Signal: fp=GCGTA pool=9
True Signal: fp=GCCTG pool=12
True Signal: fp=GGATG pool=1
True Signal: fp=GTGAG pool=0
True Signal: fp=TTAAC pool=2
True Signal: fp=AAAGC pool=1
True Signal: fp=AAAGC pool=6

5	True Signal: fp=AAGCC pool=8
	True Signal: fp=CTCAT pool=8
	True Signal: fp=AGATT pool=12
	True Signal: fp=CAGCC pool=10
	True Signal: fp=CGCAC pool=4
10	True Signal: fp=AAAGG pool=1
	True Signal: fp=GACCC pool=9
	True Signal: fp=CCCTT pool=1
	True Signal: fp=CGATT pool=11
	True Signal: fp=GAAGC pool=5
15	True Signal: fp=TCATG pool=1
	True Signal: fp=AGGAC pool=15
	True Signal: fp=TGCTA pool=4
	True Signal: fp=GAAGG pool=10
	True Signal: fp=AATAA pool=2
20	True Signal: fp=TGCTG pool=9
	True Signal: fp=GGCAG pool=1
	True Signal: fp=GAGCG pool=3
	True Signal: fp=CTTGG pool=1
	True Signal: fp=ACAAT pool=6
25	True Signal: fp=ACTCA pool=7
	True Signal: fp=TCCAC pool=10
	True Signal: fp=AATAG pool=13
	True Signal: fp=GATAA pool=1
	True Signal: fp=TACGA pool=6
30	True Signal: fp=TATTC pool=2
	True Signal: fp=CCTCC pool=3
	True Signal: fp=TAACG pool=14
	True Signal: fp=AAGCT pool=12
	True Signal: fp=AAGCT pool=5
35	True Signal: fp=ACTCG pool=15
	True Signal: fp=CAGCT pool=9
	True Signal: fp=TCCAG pool=8
	True Signal: fp=TCCAG pool=2
	True Signal: fp=CGCAT pool=11
40	True Signal: fp=TCGAC pool=9
	True Signal: fp=TCGAC pool=13
	True Signal: fp=GCTCA pool=5
	True Signal: fp=AGGAT pool=8
	True Signal: fp=TAGGA pool=15
45	True Signal: fp=AGTGA pool=14
	True Signal: fp=TAGGC pool=13
	True Signal: fp=TACGG pool=7
	True Signal: fp=TAGGG pool=13
	True Signal: fp=AATAT pool=13
	True Signal: fp=GGTGC pool=1
	True Signal: fp=GGTGC pool=4
	True Signal: fp=TCCAT pool=9

	True Signal: fp=TGAAT	pool=10
	True Signal: fp=TATTT	pool=6
	True Signal: fp=TGTCC	pool=10
	True Signal: fp=AACTA	pool=11
5	True Signal: fp=AACTA	pool=3
	True Signal: fp=CACTC	pool=7
	True Signal: fp=CTCCA	pool=6
	True Signal: fp=AAGTA	pool=7
	True Signal: fp=CAGTA	pool=8
10	True Signal: fp=GACTC	pool=14
	True Signal: fp=GTCCA	pool=3
	True Signal: fp=CTGCA	pool=11
	True Signal: fp=ATAGG	pool=12
	True Signal: fp=GTAGA	pool=8
15	True Signal: fp=GTAGA	pool=9
	True Signal: fp=TGTCT	pool=0
	True Signal: fp=CAGTG	pool=15
	True Signal: fp=GTAGC	pool=14
	True Signal: fp=GTGCC	pool=10
20	True Signal: fp=CAAAC	pool=11
	True Signal: fp=GTAGG	pool=3
	True Signal: fp=AAAAG	pool=0
	True Signal: fp=AAAAG	pool=2
	True Signal: fp=ACACG	pool=5
25	True Signal: fp=GAAAG	pool=14
	True Signal: fp=CCCGA	pool=15
	True Signal: fp=AGCCC	pool=10
	True Signal: fp=AGAGA	pool=13
	True Signal: fp=ATGCT	pool=6
30	True Signal: fp=AGAGC	pool=14
	True Signal: fp=GCTTA	pool=9
	True Signal: fp=AGGCC	pool=12
	True Signal: fp=CGGCA	pool=10
	True Signal: fp=GCCGA	pool=7
35	True Signal: fp=CCTTG	pool=2
	True Signal: fp=GCTTC	pool=5
	True Signal: fp=TTCGC	pool=10
	True Signal: fp=GCACG	pool=10
	True Signal: fp=TTGGC	pool=12
40	True Signal: fp=GTGCT	pool=9
	True Signal: fp=ACGGG	pool=11
	True Signal: fp=ACGGG	pool=3
	True Signal: fp=GCGGC	pool=11
	True Signal: fp=TAGAA	pool=15
45	True Signal: fp=CCACT	pool=13
	True Signal: fp=GGGCG	pool=2
	True Signal: fp=TCAGA	pool=9
	True Signal: fp=CGTAA	pool=6

	True	Signal:	fp=TAGAC	pool=11
	True	Signal:	fp=CTTAT	pool=13
	True	Signal:	fp=AGCCT	pool=0
	True	Signal:	fp=CGTAC	pool=7
5	True	Signal:	fp=CATCG	pool=7
	True	Signal:	fp=TCGCA	pool=7
	True	Signal:	fp=TCCCG	pool=11
	True	Signal:	fp=AGTAG	pool=9
	True	Signal:	fp=AGGCT	pool=10
10	True	Signal:	fp=GGCCT	pool=8
	True	Signal:	fp=TCGCG	pool=5
	True	Signal:	fp=GGTAG	pool=10
	True	Signal:	fp=GGTAG	pool=3
	True	Signal:	fp=GGGCT	pool=8
15	True	Signal:	fp=TGGGG	pool=1
	True	Signal:	fp=AGTAT	pool=0
	True	Signal:	fp=ATGTC	pool=9
	True	Signal:	fp=TGACT	pool=9
	True	Signal:	fp=CTGTC	pool=11
20	True	Signal:	fp=GTCTC	pool=4
	True	Signal:	fp=CTGTG	pool=3
	True	Signal:	fp=CTAAA	pool=14
	True	Signal:	fp=ACATC	pool=13
	True	Signal:	fp=GTAAA	pool=13
25	True	Signal:	fp=ATAAG	pool=13
	True	Signal:	fp=AGCTA	pool=4
	True	Signal:	fp=GTCTT	pool=13
	True	Signal:	fp=AGCTG	pool=3
	True	Signal:	fp=AGGTC	pool=1
30	True	Signal:	fp=CGCTG	pool=12
	True	Signal:	fp=GGCTC	pool=14
	True	Signal:	fp=AGGTG	pool=8
	True	Signal:	fp=GGGTA	pool=10
	True	Signal:	fp=GGGTA	pool=15
35	True	Signal:	fp=GGCTG	pool=2
	True	Signal:	fp=GGGTC	pool=10
	True	Signal:	fp=CGAAA	pool=3
	True	Signal:	fp=ATTCA	pool=13
	True	Signal:	fp=ATTCA	pool=6
40	True	Signal:	fp=TTCAA	pool=9
	True	Signal:	fp=TTCAA	pool=12
	True	Signal:	fp=AACGA	pool=11
	True	Signal:	fp=ACGAA	pool=13
	True	Signal:	fp=ATTCC	pool=2
45	True	Signal:	fp=CCGAA	pool=12
	True	Signal:	fp=CCGAA	pool=14
	True	Signal:	fp=CATTC	pool=13
	True	Signal:	fp=CCATT	pool=11

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	True Signal: fp=GGGTG pool=6
	True Signal: fp=AGAAG pool=0
	True Signal: fp=CCCAG pool=3
	True Signal: fp=CCCAG pool=5
5	True Signal: fp=CACGC pool=10
	True Signal: fp=CTTCC pool=14
	True Signal: fp=CTTCC pool=6
	True Signal: fp=TTATT pool=0
	True Signal: fp=GATTC pool=12
10	True Signal: fp=GATTC pool=14
	True Signal: fp=CAGGA pool=15
	True Signal: fp=GCATT pool=15
	True Signal: fp=AGCTT pool=4
	True Signal: fp=ATTCG pool=9
15	True Signal: fp=ATTCG pool=5
	True Signal: fp=CGAAG pool=14
	True Signal: fp=CACGG pool=9
	True Signal: fp=AAGGG pool=13
	True Signal: fp=GAGGC pool=11
20	True Signal: fp=GGCTT pool=11
	True Signal: fp=AAACT pool=4
	True Signal: fp=TCAAA pool=4
	True Signal: fp=TCAAC pool=5
	True Signal: fp=CAACT pool=4
25	True Signal: fp=AGAAT pool=10
	True Signal: fp=AATTT pool=8
	True Signal: fp=TACCC pool=5
	True Signal: fp=ACGAT pool=1
	True Signal: fp=CGAAT pool=12
30	True Signal: fp=TAAGG pool=1
	True Signal: fp=AAGGT pool=9
	True Signal: fp=AAGGT pool=12
	True Signal: fp=GCTGA pool=12
	True Signal: fp=TGCAG pool=5
35	True Signal: fp=TAGCG pool=5
	True Signal: fp=GCGAT pool=14
	True Signal: fp=GCTGC pool=10
	True Signal: fp=GCTGG pool=1
	True Signal: fp=GGTCG pool=0
40	True Signal: fp=TCAAT pool=4
	True Signal: fp=TAAGT pool=2
	True Signal: fp=CCTGT pool=5
	True Signal: fp=TCTCG pool=12
	True Signal: fp=TGTGA pool=9
45	True Signal: fp=GCTGT pool=2
	True Signal: fp=GGTCT pool=13
	True Signal: fp=CAATA pool=7
	True Signal: fp=GAATA pool=0

False positive	Signal:	fp=CCCGT	pool=4
False positive	Signal:	fp=AGTGG	pool=6
False positive	Signal:	fp=AGGTC	pool=9
False positive	Signal:	fp=GAACC	pool=1
False positive	Signal:	fp=GATTC	pool=12
False positive	Signal:	fp=AAGCT	pool=1
False positive	Signal:	fp=GCACC	pool=7
False positive	Signal:	fp=GCCCT	pool=5
False positive	Signal:	fp=GCTGC	pool=0
False positive	Signal:	fp=GACAA	pool=7
False positive	Signal:	fp=TCGCT	pool=0
False positive	Signal:	fp=CGTAA	pool=2
False positive	Signal:	fp=CGAGT	pool=3
False positive	Signal:	fp=AATGC	pool=7
False positive	Signal:	fp=AAACT	pool=5
False positive	Signal:	fp=CGATG	pool=7
False positive	Signal:	fp=ATCCA	pool=14
False positive	Signal:	fp=GGTCG	pool=1
False positive	Signal:	fp=ACCGC	pool=2
False positive	Signal:	fp=TATCA	pool=0
False positive	Signal:	fp=AATCC	pool=4
False positive	Signal:	fp=GAGGA	pool=14
False positive	Signal:	fp=TATAC	pool=5
False positive	Signal:	fp=TCGCG	pool=2
False positive	Signal:	fp=GAGGG	pool=5
False positive	Signal:	fp=ATTGA	pool=5
False positive	Signal:	fp=TCAGA	pool=15
False positive	Signal:	fp=CGGCC	pool=1
False positive	Signal:	fp=TCGCT	pool=7
False positive	Signal:	fp=TCTCA	pool=10
False positive	Signal:	fp=TCTGT	pool=11
False positive	Signal:	fp=GTGGT	pool=4
False positive	Signal:	fp=CTTCC	pool=5
False positive	Signal:	fp=GACAA	pool=14
False positive	Signal:	fp=CTGCC	pool=5
False positive	Signal:	fp=CAACT	pool=6
False positive	Signal:	fp=CGAAG	pool=13
False positive	Signal:	fp=TCGCA	pool=15
False positive	Signal:	fp=CTTGT	pool=13
False positive	Signal:	fp=GGTCC	pool=13
False positive	Signal:	fp=ATGTT	pool=14
False positive	Signal:	fp=CGGCG	pool=3
False positive	Signal:	fp=CGAGC	pool=2
False positive	Signal:	fp=AAGCA	pool=14
False positive	Signal:	fp=CAAGG	pool=9
False positive	Signal:	fp=TGGCT	pool=15
False positive	Signal:	fp=AGGAT	pool=8
False positive	Signal:	fp=ACGGG	pool=9

5	False positive	Signal: fp=CGAAA	pool=14
	False positive	Signal: fp=GTGCA	pool=4
	False positive	Signal: fp=GCTGT	pool=5
	False positive	Signal: fp=AATGA	pool=15
	False positive	Signal: fp=GATGA	pool=4
10	False positive	Signal: fp=GTAAG	pool=2
	False positive	Signal: fp=GTCGG	pool=1
	False positive	Signal: fp=TATAC	pool=1
	False positive	Signal: fp=AAAGT	pool=2
	False positive	Signal: fp=AGCGC	pool=13
15	False positive	Signal: fp=GTTCT	pool=13
	False positive	Signal: fp=GGGCG	pool=3
	False positive	Signal: fp=AAAAT	pool=7
	False positive	Signal: fp=GTAGG	pool=1
	False positive	Signal: fp=AAGAT	pool=14
20	False positive	Signal: fp=CATGC	pool=3
	False positive	Signal: fp=CGGTG	pool=7
	False positive	Signal: fp=AGAGT	pool=9
	False positive	Signal: fp=GGATT	pool=5
	False positive	Signal: fp=ATTAT	pool=12
25	False positive	Signal: fp=TGTTA	pool=0
	False positive	Signal: fp=CTGAT	pool=15
	False positive	Signal: fp=TGGTC	pool=13
	False positive	Signal: fp=GTTTA	pool=2
	False positive	Signal: fp=AAATC	pool=1
30	False positive	Signal: fp=TAGTA	pool=3
	False positive	Signal: fp=AAACA	pool=9
	False positive	Signal: fp=GTCGT	pool=10
	False positive	Signal: fp=TCGTC	pool=4
	False positive	Signal: fp=AAACT	pool=10
35	False positive	Signal: fp=AGCCT	pool=5
	False positive	Signal: fp=CAGTC	pool=9
	False positive	Signal: fp=AGATC	pool=1
	False positive	Signal: fp=CTCTG	pool=3
	False positive	Signal: fp=TGTCC	pool=9
40	False positive	Signal: fp=CTGCT	pool=15
	False positive	Signal: fp=GGTAG	pool=14
	False positive	Signal: fp=CTCTT	pool=11
	False positive	Signal: fp=CCCTT	pool=2
	False positive	Signal: fp=GAATA	pool=14
45	False positive	Signal: fp=TAACC	pool=0
	False positive	Signal: fp=GCTAT	pool=8
	False positive	Signal: fp=TACTG	pool=2
	False positive	Signal: fp=ATGTT	pool=3
	False positive	Signal: fp=GACGA	pool=12
	False positive	Signal: fp=ACAAC	pool=14
	False positive	Signal: fp=TCGAC	pool=2
	False positive	Signal: fp=ATGGA	pool=9

Index	Signal	Pool
5	False positive	Signal: fp=GCTGT pool=1
	False positive	Signal: fp=GGGGT pool=1
	False positive	Signal: fp=TGGTG pool=2
	False positive	Signal: fp=TCGAT pool=9
	False positive	Signal: fp=GATCA pool=13
10	False positive	Signal: fp=CCGGT pool=10
	False positive	Signal: fp=ATTGT pool=8
	False positive	Signal: fp=ATCAC pool=5
	False positive	Signal: fp=GGAAG pool=15
	False positive	Signal: fp=GACTA pool=0
15	False positive	Signal: fp=TCTAT pool=0
	False positive	Signal: fp=AAGCT pool=15
	False positive	Signal: fp=ATTTA pool=5
	False positive	Signal: fp=GTAA pool=7
	False positive	Signal: fp=ATAAT pool=12
20	False positive	Signal: fp=AAGTC pool=9
	False positive	Signal: fp=GCCTA pool=9
	False positive	Signal: fp=AGCCA pool=4
	False positive	Signal: fp=AACGC pool=3
	False positive	Signal: fp=GGTAA pool=15
25	False positive	Signal: fp=TACTA pool=11
	False positive	Signal: fp=GAGCC pool=6
	False positive	Signal: fp=AGAAT pool=6
	False positive	Signal: fp=AATTG pool=12
	False positive	Signal: fp=TGCCC pool=11
30	False positive	Signal: fp=AGTAA pool=12
	False positive	Signal: fp=GTAGC pool=4
	False positive	Signal: fp=TCGAG pool=4
	False positive	Signal: fp=TGCAG pool=0
	False positive	Signal: fp=GAGTA pool=1
35	False positive	Signal: fp=GTACC pool=11
	False positive	Signal: fp=TCCTG pool=5
	False positive	Signal: fp=CCTGA pool=10
	False positive	Signal: fp=GTATG pool=1
	False positive	Signal: fp=ACAGA pool=7
40	False positive	Signal: fp=GCGTC pool=15
	False positive	Signal: fp=ATCGA pool=4
	False positive	Signal: fp=ATCCT pool=5
	False positive	Signal: fp=TCGTG pool=0
	False positive	Signal: fp=TCTCT pool=15
45	False positive	Signal: fp=AGCAA pool=8
	False positive	Signal: fp=GCGCT pool=10
	False positive	Signal: fp=ACTTC pool=5
	False positive	Signal: fp=TCCAG pool=3
	False positive	Signal: fp=ACGCG pool=7
	False positive	Signal: fp=GAGCA pool=5
	False positive	Signal: fp=TCAAC pool=4
	False positive	Signal: fp=CCTTG pool=1

```
False positive Signal: fp=GAGAT pool=11
False positive Signal: fp=CTGAA pool=0
False positive Signal: fp=CTGGC pool=0
False positive Signal: fp=ACCTG pool=6
False positive Signal: fp=GATAC pool=13
False positive Signal: fp=TAGTG pool=7
False positive Signal: fp=TCGAC pool=13
False positive Signal: fp=ATTGA pool=15
False positive Signal: fp=TGTCG pool=2
False positive Signal: fp=CGTGC pool=6
False positive Signal: fp=CAGTG pool=10
False positive Signal: fp=GAGTC pool=11
False positive Signal: fp=AAGTT pool=11
False positive Signal: fp=AGAGA pool=2
False positive Signal: fp=ATATA pool=8
10mers:37056
11mers:6330
12mers:1360
13mers:536
14mers:412
15mers:395
16mers:390
17mers:382
18mers:379
19mers:376
20mers:372
21mers:372
22mers:377
23mers:371
24mers:369
25mers:367
26mers:363
27mers:365
28mers:371
29mers:366
30mers:359
31mers:360
32mers:356
33mers:358
34mers:359
35mers:359
36mers:352
37mers:346
38mers:343
39mers:340
40mers:342
41mers:344
42mers:343
```

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	43mers:337
	44mers:335
	45mers:333
	46mers:334
5	47mers:335
	48mers:334
	49mers:333
	50mers:325
	51mers:323
10	52mers:321
	53mers:322
	54mers:324
	55mers:323
	56mers:319
15	57mers:319
	58mers:319
	59mers:318
	60mers:319
	61mers:315
20	62mers:315
	63mers:312
	64mers:309
	65mers:312
	66mers:312
25	67mers:309
	68mers:308
	69mers:304
	70mers:302
	71mers:301
30	72mers:297
	73mers:297
	74mers:298
	75mers:295
	76mers:290
35	77mers:288
	78mers:290
	79mers:287
	80mers:284
	81mers:284
40	82mers:284
	83mers:285
	84mers:283
	85mers:284
	86mers:282
45	87mers:278
	88mers:276
	89mers:276
	90mers:278

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	91mers:282
	92mers:277
	93mers:270
	94mers:270
5	95mers:269
	96mers:268
	97mers:270
	98mers:269
	99mers:267
10	100mers:265
	101mers:266
	102mers:265
	103mers:265
	104mers:261
15	105mers:258
	106mers:258
	107mers:260
	108mers:254
	109mers:250
20	110mers:250
	111mers:248
	112mers:246
	113mers:244
	114mers:245
25	115mers:247
	116mers:248
	117mers:245
	118mers:245
	119mers:241
30	120mers:239
	121mers:235
	122mers:234
	123mers:236
	124mers:235
35	125mers:235
	126mers:232
	127mers:230
	128mers:232
	129mers:232
40	130mers:226
	131mers:224
	132mers:220
	133mers:221
	134mers:219
45	135mers:219
	136mers:220
	137mers:217
	138mers:213

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	139mers:213
	140mers:213
	141mers:211
	142mers:211
5	143mers:208
	144mers:211
	145mers:210
	146mers:207
	147mers:205
10	148mers:209
	149mers:208
	150mers:203
	151mers:198
15	152mers:196
	153mers:196
	154mers:194
	155mers:197
	156mers:194
20	157mers:190
	158mers:188
	159mers:187
	160mers:186
	161mers:188
	162mers:187
25	163mers:184
	164mers:184
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30	168mers:182
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35	173mers:169
	174mers:168
	175mers:170
	176mers:170
	177mers:166
40	178mers:166
	179mers:164
	180mers:165
	181mers:167
	182mers:161
45	183mers:159
	184mers:159
	185mers:159
	186mers:155

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	187mers:156
	188mers:154
	189mers:151
	190mers:150
5	191mers:154
	192mers:152
	193mers:150
	194mers:150
	195mers:144
10	196mers:143
	197mers:144
	198mers:140
	199mers:141
	200mers:142
15	201mers:137
	202mers:136
	203mers:136
	204mers:135
	205mers:134
20	206mers:132
	207mers:129
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25	211mers:123
	212mers:122
	213mers:122
	214mers:123
	215mers:121
30	216mers:119
	217mers:121
	218mers:121
	219mers:121
	220mers:120
35	221mers:115
	222mers:111
	223mers:112
	224mers:112
	225mers:109
40	226mers:111
	227mers:107
	228mers:104
	229mers:104
	230mers:103
45	231mers:101
	232mers:102
	233mers:99
	234mers:96

	235mers:94
	236mers:91
	237mers:92
	238mers:92
5	239mers:90
	240mers:85
	241mers:84
	242mers:82
	243mers:80
10	244mers:79
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	247mers:77
	248mers:75
15	249mers:74
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20	254mers:74
	255mers:72
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25	259mers:63
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	267mers:60
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35	269mers:52
	270mers:50
	271mers:51
	272mers:48
	273mers:48
40	274mers:49
	275mers:43
	276mers:40
	277mers:41
	278mers:40
45	279mers:39
	280mers:38
	281mers:32
	282mers:29

r300.100.15.out

Using pool D16

Using sequence r300

5

True Signal: fp=CTCGA pool=7

True Signal: fp=CTACG pool=1

True Signal: fp=CTACG pool=2

True Signal: fp=GTACC pool=0

10

True Signal: fp=ATCGC pool=1

True Signal: fp=GAATG pool=15

True Signal: fp=ATCGG pool=13

True Signal: fp=GTCGC pool=13

True Signal: fp=ACCCA pool=14

15

True Signal: fp=CTGGG pool=10

True Signal: fp=CAATT pool=3

True Signal: fp=GACAA pool=1

True Signal: fp=TACTA pool=3

True Signal: fp=ACCCC pool=6

20

True Signal: fp=AGACA pool=10

True Signal: fp=TTCCA pool=8

True Signal: fp=TTCCA pool=4

True Signal: fp=ACGCA pool=8

True Signal: fp=GACAC pool=2

25

True Signal: fp=CGACA pool=10

True Signal: fp=CGACA pool=11

True Signal: fp=CTACT pool=10

True Signal: fp=CCCCC pool=9

True Signal: fp=CCCCC pool=14

30

True Signal: fp=TTCCC pool=12

True Signal: fp=GCCCA pool=1

True Signal: fp=GAGAA pool=8

True Signal: fp=CCAGC pool=5

True Signal: fp=CAGAG pool=3

35

True Signal: fp=GCAGA pool=1

True Signal: fp=GCAGC pool=12

True Signal: fp=CGCGA pool=3

True Signal: fp=AGCGC pool=0

True Signal: fp=GGACC pool=1

40

True Signal: fp=CCAGG pool=7

True Signal: fp=TTAGG pool=1

True Signal: fp=GAGAG pool=1

True Signal: fp=TAAAA pool=11

True Signal: fp=AGCGG pool=4

45

True Signal: fp=ACTAA pool=15

True Signal: fp=CGGGC pool=4

True Signal: fp=ACTAC pool=4

True Signal: fp=ACTAC pool=7

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	True Signal: fp=AGGGG pool=9
	True Signal: fp=AGGGG pool=5
	True Signal: fp=TTTAA pool=15
	True Signal: fp=GGGGC pool=7
5	True Signal: fp=CAGAT pool=11
	True Signal: fp=CATGA pool=14
	True Signal: fp=AATGC pool=1
	True Signal: fp=CCCCT pool=13
10	True Signal: fp=GACAT pool=4
	True Signal: fp=TCTTC pool=8
	True Signal: fp=CCAGT pool=10
	True Signal: fp=CCAGT pool=9
	True Signal: fp=GCTAC pool=9
15	True Signal: fp=TTTAG pool=11
	True Signal: fp=TGAGA pool=12
	True Signal: fp=TGCCG pool=8
	True Signal: fp=GCGCT pool=15
	True Signal: fp=CGCGT pool=4
20	True Signal: fp=TGAGG pool=7
	True Signal: fp=TCGGG pool=1
	True Signal: fp=CGGGT pool=8
	True Signal: fp=CGGGT pool=12
	True Signal: fp=GGCGT pool=12
25	True Signal: fp=TATCA pool=4
	True Signal: fp=ATATC pool=2
	True Signal: fp=CTATC pool=6
	True Signal: fp=GGGGT pool=11
	True Signal: fp=GGGGT pool=14
	True Signal: fp=TATCG pool=3
30	True Signal: fp=GCTAT pool=3
	True Signal: fp=GATGT pool=0
	True Signal: fp=TGGCT pool=6
	True Signal: fp=CTCAA pool=15
	True Signal: fp=ATCAG pool=6
35	True Signal: fp=CGATA pool=8
	True Signal: fp=CTGAC pool=5
	True Signal: fp=GTATT pool=11
	True Signal: fp=ATGAG pool=8
	True Signal: fp=GCCTC pool=0
40	True Signal: fp=GTGAA pool=2
	True Signal: fp=GCGTA pool=0
	True Signal: fp=GCGTA pool=9
	True Signal: fp=GCCTG pool=12
	True Signal: fp=GGATG pool=1
45	True Signal: fp=GTGAG pool=0
	True Signal: fp=TTAAC pool=2
	True Signal: fp=AAAGC pool=1
	True Signal: fp=AAAGC pool=6

True Signal: fp=AAGCC pool=8
True Signal: fp=CTCAT pool=8
True Signal: fp=AGATT pool=12
True Signal: fp=CAGCC pool=10
True Signal: fp=CGCAC pool=4
True Signal: fp=AAAGG pool=1
True Signal: fp=GACCC pool=9
True Signal: fp=CCCTT pool=1
True Signal: fp=CGATT pool=11
True Signal: fp=GAAGC pool=5
True Signal: fp=TCATG pool=1
True Signal: fp=AGGAC pool=15
True Signal: fp=TGCTA pool=4
True Signal: fp=GAAGG pool=10
True Signal: fp=AATAA pool=2
True Signal: fp=TGCTG pool=9
True Signal: fp=GGCAG pool=1
True Signal: fp=GAGCG pool=3
True Signal: fp=CTTGG pool=1
True Signal: fp=ACAAT pool=6
True Signal: fp=ACTCA pool=7
True Signal: fp=TCCAC pool=10
True Signal: fp=AATAG pool=13
True Signal: fp=GATAA pool=1
True Signal: fp=TACGA pool=6
True Signal: fp=TATTC pool=2
True Signal: fp=CCTCC pool=3
True Signal: fp=TAACG pool=14
True Signal: fp=AAGCT pool=12
True Signal: fp=AAGCT pool=5
True Signal: fp=ACTCG pool=15
True Signal: fp=CAGCT pool=9
True Signal: fp=TCCAG pool=8
True Signal: fp=TCCAG pool=2
True Signal: fp=CGCAT pool=11
True Signal: fp=TCGAC pool=9
True Signal: fp=TCGAC pool=13
True Signal: fp=GCTCA pool=5
True Signal: fp=AGGAT pool=8
True Signal: fp=TAGGA pool=15
True Signal: fp=AGTGA pool=14
True Signal: fp=TAGGC pool=13
True Signal: fp=TACGG pool=7
True Signal: fp=TAGGG pool=13
True Signal: fp=AATAT pool=13
True Signal: fp=GGTGC pool=1
True Signal: fp=GGTGC pool=4
True Signal: fp=TCCAT pool=9

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	True Signal: fp=TGAAT pool=10
	True Signal: fp=TATTT pool=6
	True Signal: fp=TGTCCT pool=10
	True Signal: fp=AACTA pool=11
5	True Signal: fp=AACTA pool=3
	True Signal: fp=CACTC pool=7
	True Signal: fp=CTCCA pool=6
	True Signal: fp=AAGTA pool=7
	True Signal: fp=CAGTA pool=8
10	True Signal: fp=GACTC pool=14
	True Signal: fp=GTCCA pool=3
	True Signal: fp=CTGCA pool=11
	True Signal: fp=ATAGG pool=12
	True Signal: fp=GTAGA pool=8
15	True Signal: fp=GTAGA pool=9
	True Signal: fp=TGTCT pool=0
	True Signal: fp=CAGTG pool=15
	True Signal: fp=GTAGC pool=14
	True Signal: fp=GTGCC pool=10
20	True Signal: fp=CAAAC pool=11
	True Signal: fp=GTAGG pool=3
	True Signal: fp=AAAAG pool=0
	True Signal: fp=AAAAG pool=2
	True Signal: fp=ACACG pool=5
25	True Signal: fp=GAAAG pool=14
	True Signal: fp=CCCGA pool=15
	True Signal: fp=AGCCC pool=10
	True Signal: fp=AGAGA pool=13
	True Signal: fp=ATGCT pool=6
30	True Signal: fp=AGAGC pool=14
	True Signal: fp=GCTTA pool=9
	True Signal: fp=AGGCC pool=12
	True Signal: fp=CGGCA pool=10
	True Signal: fp=GCCGA pool=7
35	True Signal: fp=CCTTG pool=2
	True Signal: fp=GCTTC pool=5
	True Signal: fp=TTCGC pool=10
	True Signal: fp=GCACG pool=10
	True Signal: fp=TTGGC pool=12
40	True Signal: fp=GTGCT pool=9
	True Signal: fp=ACGGG pool=11
	True Signal: fp=ACGGG pool=3
	True Signal: fp=GCGGC pool=11
	True Signal: fp=TAGAA pool=15
45	True Signal: fp=CCACT pool=13
	True Signal: fp=GGGCG pool=2
	True Signal: fp=TCAGA pool=9
	True Signal: fp=CGTAA pool=6

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	True Signal: fp=TAGAC pool=11
	True Signal: fp=CTTAT pool=13
	True Signal: fp=AGCCT pool=0
	True Signal: fp=CGTAC pool=7
5	True Signal: fp=CATCG pool=7
	True Signal: fp=TCGCA pool=7
	True Signal: fp=TCCCG pool=11
	True Signal: fp=AGTAG pool=9
	True Signal: fp=AGGCT pool=10
10	True Signal: fp=GGCCT pool=8
	True Signal: fp=TCGCG pool=5
	True Signal: fp=GGTAG pool=10
	True Signal: fp=GGTAG pool=3
	True Signal: fp=GGGCT pool=8
15	True Signal: fp=TGGGG pool=1
	True Signal: fp=AGTAT pool=0
	True Signal: fp=ATGTC pool=9
	True Signal: fp=TGACT pool=9
	True Signal: fp=CTGTC pool=11
20	True Signal: fp=GTCTC pool=4
	True Signal: fp=CTGTG pool=3
	True Signal: fp=CTAAA pool=14
	True Signal: fp=ACATC pool=13
	True Signal: fp=GTAAA pool=13
25	True Signal: fp=ATAAG pool=13
	True Signal: fp=AGCTA pool=4
	True Signal: fp=GTCTT pool=13
	True Signal: fp=AGCTG pool=3
	True Signal: fp=AGGTC pool=1
30	True Signal: fp=CGCTG pool=12
	True Signal: fp=GGCTC pool=14
	True Signal: fp=AGGTG pool=8
	True Signal: fp=GGGTA pool=10
	True Signal: fp=GGGTA pool=15
35	True Signal: fp=GGCTG pool=2
	True Signal: fp=GGGTC pool=10
	True Signal: fp=CGAAA pool=3
	True Signal: fp=ATTCA pool=13
	True Signal: fp=ATTCA pool=6
40	True Signal: fp=TTCAA pool=9
	True Signal: fp=TTCAA pool=12
	True Signal: fp=AACGA pool=11
	True Signal: fp=ACGAA pool=13
	True Signal: fp=ATTCC pool=2
45	True Signal: fp=CCGAA pool=12
	True Signal: fp=CCGAA pool=14
	True Signal: fp=CATTC pool=13
	True Signal: fp=CCATT pool=11

	True	Signal:	fp=GGGTG	pool=6
	True	Signal:	fp=AGAAG	pool=0
	True	Signal:	fp=CCCAG	pool=3
	True	Signal:	fp=CCCAG	pool=5
5	True	Signal:	fp=CACGC	pool=10
	True	Signal:	fp=CTTCC	pool=14
	True	Signal:	fp=CTTCC	pool=6
	True	Signal:	fp=TTATT	pool=0
	True	Signal:	fp=GATTC	pool=12
10	True	Signal:	fp=GATTC	pool=14
	True	Signal:	fp=CAGGA	pool=15
	True	Signal:	fp=GCATT	pool=15
	True	Signal:	fp=AGCTT	pool=4
	True	Signal:	fp=ATTCG	pool=9
15	True	Signal:	fp=ATTCG	pool=5
	True	Signal:	fp=CGAAG	pool=14
	True	Signal:	fp=CACGG	pool=9
	True	Signal:	fp=AAGGG	pool=13
	True	Signal:	fp=GAGGC	pool=11
20	True	Signal:	fp=GGCTT	pool=11
	True	Signal:	fp=AAACT	pool=4
	True	Signal:	fp=TCAAA	pool=4
	True	Signal:	fp=TCAAC	pool=5
	True	Signal:	fp=CAACT	pool=4
25	True	Signal:	fp=AGAAT	pool=10
	True	Signal:	fp=AATTT	pool=8
	True	Signal:	fp=TACCC	pool=5
	True	Signal:	fp=ACGAT	pool=1
	True	Signal:	fp=CGAAT	pool=12
30	True	Signal:	fp=TAAGG	pool=1
	True	Signal:	fp=AAGGT	pool=9
	True	Signal:	fp=AAGGT	pool=12
	True	Signal:	fp=GCTGA	pool=12
	True	Signal:	fp=TGCAG	pool=5
35	True	Signal:	fp=TAGCG	pool=5
	True	Signal:	fp=GCGAT	pool=14
	True	Signal:	fp=GCTGC	pool=10
	True	Signal:	fp=GCTGG	pool=1
	True	Signal:	fp=GGTCG	pool=0
40	True	Signal:	fp=TCAAT	pool=4
	True	Signal:	fp=TAAGT	pool=2
	True	Signal:	fp=CCTGT	pool=5
	True	Signal:	fp=TCTCG	pool=12
	True	Signal:	fp=TGTGA	pool=9
45	True	Signal:	fp=GCTGT	pool=2
	True	Signal:	fp=GGTCT	pool=13
	True	Signal:	fp=CAATA	pool=7
	True	Signal:	fp=GAATA	pool=0

True Signal: fp=GAATA pool=15

True Signal: fp=ATTTA pool=1

True Signal: fp=ATTTA pool=12

False positive Signal: fp=CAATT pool=6

5 False positive Signal: fp=AGAGT pool=4

False positive Signal: fp=TGCAC pool=15

False positive Signal: fp=CATCA pool=9

False positive Signal: fp=ACACG pool=1

False positive Signal: fp=GTTTG pool=5

10 False positive Signal: fp=CAGGT pool=12

False positive Signal: fp=TCACT pool=2

False positive Signal: fp=GGCAA pool=13

False positive Signal: fp=GCCTA pool=2

False positive Signal: fp=AGGAG pool=11

15 False positive Signal: fp=GGCCG pool=8

False positive Signal: fp=CTCGA pool=8

False positive Signal: fp=GGAGG pool=10

False positive Signal: fp=GACCT pool=7

False positive Signal: fp=CAGAG pool=14

20 False positive Signal: fp=ACTTC pool=11

False positive Signal: fp=AGACT pool=8

False positive Signal: fp=TGCTT pool=12

False positive Signal: fp=GGTCG pool=4

False positive Signal: fp=GATAC pool=8

25 False positive Signal: fp=AGGCG pool=4

False positive Signal: fp=TGCGG pool=3

False positive Signal: fp=GTCTC pool=7

False positive Signal: fp=ACCCA pool=10

False positive Signal: fp=ACATA pool=9

30 False positive Signal: fp=AAGGG pool=5

False positive Signal: fp=GCGAT pool=9

False positive Signal: fp=CTATT pool=11

False positive Signal: fp=TAGGT pool=8

False positive Signal: fp=GACCG pool=11

35 False positive Signal: fp=ACATT pool=1

False positive Signal: fp=GCTAC pool=2

False positive Signal: fp=ACAAT pool=7

False positive Signal: fp=AGGAC pool=7

False positive Signal: fp=GCCTC pool=13

40 False positive Signal: fp=CTAGT pool=9

False positive Signal: fp=AGTTA pool=8

False positive Signal: fp=ATAGA pool=14

False positive Signal: fp=ATTTC pool=10

False positive Signal: fp=CGATC pool=0

45 False positive Signal: fp=GCGTT pool=1

False positive Signal: fp=CGGAG pool=3

False positive Signal: fp=GTATG pool=8

False positive Signal: fp=TCGAA pool=4


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False positive Signal: fp=CCTCA pool=15
False positive Signal: fp=GAGCT pool=2
False positive Signal: fp=CGGCT pool=0
False positive Signal: fp=GCCGA pool=9
5 False positive Signal: fp=TAAAC pool=7
False positive Signal: fp=TAGGT pool=8
False positive Signal: fp=GGGAT pool=12
False negative : fp= pool=
False negative : fp=CTCGA pool=7
10 False negative : fp=CTACG pool=1
False negative : fp=CTACG pool=2
False negative : fp=GTACC pool=0
False negative : fp=ATCGC pool=1
False negative : fp=GAATG pool=15
15 False negative : fp=ATCGG pool=13
False negative : fp=GTCGC pool=13
False negative : fp=ACCCA pool=14
False negative : fp=CTGGG pool=10
False negative : fp=CAATT pool=3
20 False negative : fp=GACAA pool=1
False negative : fp=TACTA pool=3
False negative : fp=ACCCC pool=6
10mers:23488
11mers:20478
25 12mers:15215
13mers:10346
14mers:7890
15mers:5945
16mers:5080
30 17mers:4433
18mers:4074
19mers:3825
20mers:3745
21mers:3700
35 22mers:3705
23mers:3680
24mers:3668
25mers:3676
26mers:3670
40 27mers:3688
28mers:3719
29mers:3742
30mers:3734
31mers:3767
45 32mers:3837
33mers:3855
34mers:3867
35mers:3953

```

	36mers:3981
	37mers:3995
	38mers:4024
	39mers:4041
5	40mers:4058
	41mers:4039
	42mers:4085
	43mers:4135
	44mers:4217
10	45mers:4386
	46mers:4528
	47mers:4608
	48mers:4641
	49mers:4644
15	50mers:4662
	51mers:4705
	52mers:4786
	53mers:4845
	54mers:4875
20	55mers:4899
	56mers:4935
	57mers:4925
	58mers:4943
	59mers:4993
25	60mers:5058
	61mers:5142
	62mers:5174
	63mers:5221
	64mers:5262
30	65mers:5295
	66mers:5287
	67mers:5312
	68mers:5383
	69mers:5483
35	70mers:5601
	71mers:5707
	72mers:5814
	73mers:5885
	74mers:5954
40	75mers:6047
	76mers:6110
	77mers:6127
	78mers:6109
	79mers:6137
45	80mers:6176
	81mers:6186
	82mers:6242
	83mers:6311

5	84mers:6361
	85mers:6382
	86mers:6372
	87mers:6417
	88mers:6464
10	89mers:6507
	90mers:6610
	91mers:6646
	92mers:6616
	93mers:6595
15	94mers:6584
	95mers:6631
	96mers:6684
	97mers:6771
	98mers:6832
20	99mers:6829
	100mers:6841
	101mers:6887
	102mers:6853
	103mers:6867
25	104mers:6882
	105mers:6897
	106mers:6957
	107mers:7050
	108mers:7186
30	109mers:7307
	110mers:7360
	111mers:7470
	112mers:7521
	113mers:7502
35	114mers:7556
	115mers:7560
	116mers:7605
	117mers:7619
	118mers:7587
40	119mers:7614
	120mers:7620
	121mers:7630
	122mers:7664
	123mers:7626
45	124mers:7592
	125mers:7575
	126mers:7532
	127mers:7528
	128mers:7487
	129mers:7419
	130mers:7372
	131mers:7363

	132mers:7396
	133mers:7453
	134mers:7442
	135mers:7436
5	136mers:7425
	137mers:7365
	138mers:7383
	139mers:7426
	140mers:7429
10	141mers:7487
	142mers:7491
	143mers:7446
	144mers:7414
	145mers:7405
15	146mers:7429
	147mers:7434
	148mers:7497
	149mers:7558
	150mers:7550
20	151mers:5291
	152mers:5258
	153mers:5165
	154mers:5051
	155mers:4937
25	156mers:4850
	157mers:4858
	158mers:4844
	159mers:4796
	160mers:4755
30	161mers:4666
	162mers:4602
	163mers:4557
	164mers:4509
	165mers:4503
35	166mers:4487
	167mers:4478
	168mers:4466
	169mers:4432
	170mers:4407
40	171mers:4389
	172mers:4342
	173mers:4332
	174mers:4266
	175mers:4166
45	176mers:4115
	177mers:4031
	178mers:3959
	179mers:3857

5	180mers:3758
	181mers:3718
	182mers:3685
	183mers:3632
	184mers:3575
10	185mers:3498
	186mers:3454
	187mers:3434
	188mers:3421
	189mers:3424
15	190mers:3396
	191mers:3361
	192mers:3340
	193mers:3271
	194mers:3218
20	195mers:3200
	196mers:3130
	197mers:3091
	198mers:3067
	199mers:3020
25	200mers:3013
	201mers:3011
	202mers:3032
	203mers:3015
	204mers:2876
30	205mers:2800
	206mers:2757
	207mers:2733
	208mers:2740
	209mers:2680
35	210mers:2610
	211mers:2558
	212mers:2511
	213mers:2513
	214mers:2473
40	215mers:2397
	216mers:2317
	217mers:2208
	218mers:2143
	219mers:2141
45	220mers:2118
	221mers:2114
	222mers:2144
	223mers:2121
	224mers:2104
	225mers:2077
	226mers:2077
	227mers:2029

	228mers:1924
	229mers:1870
	230mers:1823
	231mers:1781
5	232mers:1772
	233mers:1731
	234mers:1625
	235mers:1561
	236mers:1515
10	237mers:1493
	238mers:1442
	239mers:1379
	240mers:1323
	241mers:1246
15	242mers:1195
	243mers:1197
	244mers:1160
	245mers:1137
	246mers:1127
20	247mers:1099
	248mers:1095
	249mers:1076
	250mers:1046
	251mers:991
25	252mers:944
	253mers:916
	254mers:901
	255mers:881
	256mers:877
30	257mers:862
	258mers:818
	259mers:789
	260mers:771
	261mers:754
35	262mers:728
	263mers:698
	264mers:663
	265mers:610
	266mers:566
40	267mers:555
	268mers:521
	269mers:474
	270mers:418
	271mers:367
45	272mers:343
	273mers:326
	274mers:316
	275mers:294

5

GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCGCTG
GGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTTCGCACGGGCTTATTTAAC
GAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGGC
CTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGATGT
CTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTGA

DotsOn=285

Solutions: 11

[illegible]

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True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12

10mers:18240

11mers:2483

5 12mers:581

13mers:357

14mers:335

15mers:325

16mers:321

10 17mers:322

18mers:319

19mers:317

20mers:315

21mers:313

15 22mers:313

23mers:310

24mers:310

25mers:310

26mers:307

20 27mers:305

28mers:304

29mers:302

30mers:302

31mers:301

25 32mers:298

33mers:297

34mers:296

35mers:295

36mers:294

30 37mers:293

38mers:292

39mers:292

40mers:291

41mers:290

35 42mers:289

43mers:288

44mers:287

45mers:288

46mers:285

40 47mers:283

48mers:282

49mers:281

50mers:281

51mers:279

45 52mers:278

53mers:277

54mers:276

55mers:275

r300.100.15.DN16.out

Using pool DN16

Using sequence r300

5
True Signal: fp=CTCGA pool=7
True Signal: fp=CTACG pool=1
True Signal: fp=CTACG pool=2
True Signal: fp=GTACC pool=0
10 True Signal: fp=ATCGC pool=1
True Signal: fp=GAATG pool=15
True Signal: fp=ATCGG pool=13
True Signal: fp=GTCGC pool=13
True Signal: fp=ACCCA pool=14
15 True Signal: fp=CTGGG pool=10
True Signal: fp=CAATT pool=3
True Signal: fp=GACAA pool=1
True Signal: fp=TACTA pool=3
True Signal: fp=ACCCC pool=6
20 True Signal: fp=AGACA pool=10
True Signal: fp=TTCCA pool=8
True Signal: fp=TTCCA pool=4
True Signal: fp=ACGCA pool=8
True Signal: fp=GACAC pool=2
25 True Signal: fp=CGACA pool=10
True Signal: fp=CGACA pool=11
True Signal: fp=CTACT pool=10
True Signal: fp=CCCCC pool=2
True Signal: fp=CCCCC pool=14
30 True Signal: fp=TTCCC pool=12
True Signal: fp=GCCCCA pool=1
True Signal: fp=GAGAA pool=8
True Signal: fp=CCAGC pool=5
True Signal: fp=CAGAG pool=3
35 True Signal: fp=GCAGA pool=1
True Signal: fp=GCAGC pool=12
True Signal: fp=CGCGA pool=3
True Signal: fp=AGCGC pool=0
True Signal: fp=GGACC pool=1
40 True Signal: fp=CCAGG pool=7
True Signal: fp=TTAGG pool=1
True Signal: fp=GAGAG pool=6
True Signal: fp=TAAAA pool=11
True Signal: fp=AGCGG pool=4
45 True Signal: fp=ACTAA pool=15
True Signal: fp=CGGGC pool=4
True Signal: fp=ACTAC pool=4
True Signal: fp=ACTAC pool=7

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 5 True Signal: fp=CTTAT pool=13
 True Signal: fp=AGCCT pool=0
 True Signal: fp=CGTAC pool=7
 True Signal: fp=CATCG pool=7
 True Signal: fp=TCGCA pool=7
 True Signal: fp=TCCCG pool=1
 True Signal: fp=AGTAG pool=9
 True Signal: fp=AGGCT pool=10
 10 True Signal: fp=GGCCT pool=8
 True Signal: fp=TCGCG pool=5
 True Signal: fp=GGTAG pool=10
 True Signal: fp=GGTAG pool=3
 True Signal: fp=GGGCT pool=8
 True Signal: fp=TGGGG pool=1
 15 True Signal: fp=AGTAT pool=0
 True Signal: fp=ATGTC pool=9
 True Signal: fp=TGACT pool=9
 True Signal: fp=CTGTC pool=11
 True Signal: fp=GTCTC pool=4
 20 True Signal: fp=CTGTG pool=3
 True Signal: fp=CTAAA pool=14
 True Signal: fp=ACATC pool=13
 True Signal: fp=GTAAA pool=13
 True Signal: fp=ATAAG pool=13
 25 True Signal: fp=AGCTA pool=4
 True Signal: fp=GTCTT pool=13
 True Signal: fp=AGCTG pool=4
 True Signal: fp=AGGTC pool=1
 True Signal: fp=CGCTG pool=12
 30 True Signal: fp=GGCTC pool=14
 True Signal: fp=AGGTG pool=8
 True Signal: fp=GGGTA pool=10
 True Signal: fp=GGGTA pool=15
 True Signal: fp=GGCTG pool=2
 35 True Signal: fp=GGGTC pool=10
 True Signal: fp=CGAAA pool=3
 True Signal: fp=ATTCA pool=13
 True Signal: fp=ATTCA pool=6
 True Signal: fp=TTCAA pool=9
 40 True Signal: fp=TTCAA pool=12
 True Signal: fp=AACGA pool=11
 True Signal: fp=ACGAA pool=13
 True Signal: fp=ATTCC pool=2
 True Signal: fp=CCGAA pool=12
 45 True Signal: fp=CCGAA pool=14
 True Signal: fp=CATTC pool=13
 True Signal: fp=CCATT pool=11
 True Signal: fp=GGGTG pool=6

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5 True Signal: fp=AGAAG pool=0
True Signal: fp=CCCAG pool=3
True Signal: fp=CCCAG pool=5
True Signal: fp=CACGC pool=10
True Signal: fp=CTTCC pool=14
True Signal: fp=CTTCC pool=6
True Signal: fp=TTATT pool=0
True Signal: fp=GATTC pool=12
True Signal: fp=GATTC pool=14
10 True Signal: fp=CAGGA pool=6
True Signal: fp=GCATT pool=15
True Signal: fp=AGCTT pool=4
True Signal: fp=ATTCG pool=9
True Signal: fp=ATTCG pool=5
15 True Signal: fp=CGAAG pool=14
True Signal: fp=CACGG pool=9
True Signal: fp=AAGGG pool=13
True Signal: fp=GAGGC pool=11
True Signal: fp=GGCTT pool=11
20 True Signal: fp=AAACT pool=4
True Signal: fp=TCAAA pool=4
True Signal: fp=TCAAC pool=5
True Signal: fp=CAACT pool=4
True Signal: fp=AGAAT pool=10
25 True Signal: fp=AATTT pool=8
True Signal: fp=TACCC pool=5
True Signal: fp=ACGAT pool=1
True Signal: fp=CGAAT pool=6
True Signal: fp=TAAGG pool=1
30 True Signal: fp=AAGGT pool=9
True Signal: fp=AAGGT pool=12
True Signal: fp=GCTGA pool=12
True Signal: fp=TGCAG pool=5
True Signal: fp=TAGCG pool=5
35 True Signal: fp=GCGAT pool=14
True Signal: fp=GCTGC pool=10
True Signal: fp=GCTGG pool=1
True Signal: fp=GGTCG pool=0
True Signal: fp=TCAAT pool=4
40 True Signal: fp=TAAGT pool=2
True Signal: fp=CCTGT pool=5
True Signal: fp=TCTCG pool=12
True Signal: fp=TGTGA pool=9
True Signal: fp=GCTGT pool=2
45 True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0
True Signal: fp=GAATA pool=15

True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12
False positive Signal: fp=AGACT pool=2
False positive Signal: fp=AACTG pool=12
False positive Signal: fp=CCACA pool=11
False positive Signal: fp=GCCGC pool=7
False positive Signal: fp=CATAC pool=2
False positive Signal: fp=GTGTA pool=0
False positive Signal: fp=AAGAG pool=9
False positive Signal: fp=GATGT pool=7
False positive Signal: fp=CAAGC pool=6
False positive Signal: fp=GGGAC pool=3
False positive Signal: fp=ATTTTC pool=9
False positive Signal: fp=GATTAA pool=1
False positive Signal: fp=TCCCT pool=10
False positive Signal: fp=GGTAC pool=11
False positive Signal: fp=GCAGC pool=9
False positive Signal: fp=CCGCT pool=4
False positive Signal: fp=CATTT pool=3
False positive Signal: fp=ACTGA pool=15
False positive Signal: fp=AGAGC pool=2
False positive Signal: fp=GTCCA pool=10
False positive Signal: fp=TGAGA pool=2
False positive Signal: fp=GAATC pool=10
False positive Signal: fp=ATCTC pool=1
False positive Signal: fp=CACCC pool=5
False positive Signal: fp=CTGGT pool=10
False positive Signal: fp=CGGCT pool=7
False positive Signal: fp=CAAGT pool=3
False positive Signal: fp=TAGAT pool=2
False positive Signal: fp=AGGCG pool=2
False positive Signal: fp=GTCTA pool=11
False positive Signal: fp=CAATA pool=1
False positive Signal: fp=GTAGG pool=8
False positive Signal: fp=GTGAC pool=2
False positive Signal: fp=GATGC pool=4
False positive Signal: fp=GACGC pool=2
False positive Signal: fp=AGCCA pool=12
False positive Signal: fp=GCAGC pool=7
False positive Signal: fp=GGTGA pool=7
False positive Signal: fp=TATCT pool=6
False positive Signal: fp=CATAT pool=15
False positive Signal: fp=AGATC pool=7
False positive Signal: fp=TATAG pool=14
False positive Signal: fp=TCAAA pool=0
False positive Signal: fp=ACTCA pool=10
False positive Signal: fp=GACAA pool=3
False positive Signal: fp=GTCTA pool=9

Number of mers	False positive	Signal	pool
5	False positive	Signal: fp=CCGGT	pool=3
	False positive	Signal: fp=ACAAA	pool=13
	False positive	Signal: fp=TCTTT	pool=14
	False positive	Signal: fp=CTGTA	pool=6
	False positive	Signal: fp=CAGTG	pool=15
10	False positive	Signal: fp=CCCAG	pool=0
	False negative	: fp=	pool=
	False negative	: fp=CTCGA	pool=7
	False negative	: fp=CTACG	pool=1
	False negative	: fp=CTACG	pool=2
15	False negative	: fp=GTACC	pool=0
	False negative	: fp=ATCGC	pool=1
	False negative	: fp=GAATG	pool=15
	False negative	: fp=ATCGG	pool=13
	False negative	: fp=GTCGC	pool=13
20	False negative	: fp=ACCCA	pool=14
	False negative	: fp=CTGGG	pool=10
	False negative	: fp=CAATT	pool=3
	False negative	: fp=GACAA	pool=1
	False negative	: fp=TACTA	pool=3
25	False negative	: fp=ACCCC	pool=6
	10mers:	23552	
	11mers:	20332	
	12mers:	15187	
	13mers:	10500	
30	14mers:	8165	
	15mers:	6357	
	16mers:	5426	
	17mers:	4711	
	18mers:	4327	
35	19mers:	4105	
	20mers:	4006	
	21mers:	3949	
	22mers:	3895	
	23mers:	3800	
40	24mers:	3721	
	25mers:	3650	
	26mers:	3611	
	27mers:	3627	
	28mers:	3613	
45	29mers:	3613	
	30mers:	3605	
	31mers:	3596	
	32mers:	3619	
	33mers:	3656	
	34mers:	3673	
	35mers:	3700	
	36mers:	3714	

5	181mers:2992
	182mers:3019
	183mers:3002
	184mers:2973
	185mers:2965
10	186mers:2973
	187mers:2981
	188mers:2955
	189mers:2899
	190mers:2836
15	191mers:2756
	192mers:2707
	193mers:2673
	194mers:2646
	195mers:2628
20	196mers:2618
	197mers:2591
	198mers:2580
	199mers:2596
	200mers:2623
25	201mers:2623
	202mers:2595
	203mers:2583
	204mers:2529
	205mers:2505
30	206mers:2524
	207mers:2527
	208mers:2555
	209mers:2523
	210mers:2487
35	211mers:2431
	212mers:2364
	213mers:2307
	214mers:2263
	215mers:2227
40	216mers:2168
	217mers:2123
	218mers:2077
	219mers:2065
	220mers:2035
45	221mers:2020
	222mers:2034
	223mers:2038
	224mers:2026
	225mers:2000
	226mers:1975
	227mers:1943
	228mers:1879

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	229mers:1808
	230mers:1771
	231mers:1720
	232mers:1687
5	233mers:1620
	234mers:1548
	235mers:1492
	236mers:1453
	237mers:1405
10	238mers:1381
	239mers:1338
	240mers:1272
	241mers:1222
	242mers:1190
15	243mers:1171
	244mers:1129
	245mers:1104
	246mers:1095
	247mers:1066
20	248mers:1021
	249mers:996
	250mers:939
	251mers:896
	252mers:850
25	253mers:795
	254mers:742
	255mers:679
	256mers:649
	257mers:631
30	258mers:613
	259mers:602
	260mers:605
	261mers:600
	262mers:585
35	263mers:568
	264mers:540
	265mers:509
	266mers:487
	267mers:472
40	268mers:451
	269mers:418
	270mers:395
	271mers:365
	272mers:337
45	273mers:319
	274mers:285
	275mers:266
	276mers:246

277mers:223
 278mers:203
 279mers:194
 280mers:183
 5 281mers:173
 282mers:173
 283mers:161
 284mers:145
 10 285mers:136
 286mers:135
 287mers:130
 288mers:123
 289mers:121
 290mers:105
 15 291mers:91
 292mers:84
 293mers:66
 294mers:53
 295mers:41
 20 296mers:31
 297mers:26
 298mers:21
 299mers:16
 300mers:10
 25 GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCGCTG
 GGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTTCGCACGGGCTTATTTAAC
 GAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGGC
 CTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGATGT
 CTTCCCGAAAGCTATCGGGTAGAATATCAGATTTCGTTTAA
 30 True solution DotsOn=285

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 35 GAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGGC
 CTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGATGT
 CTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCATGT
 DotsOn=283

 GG TAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCGCT
 40 GGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTTCGCACGGGCTTATTTAA
 CGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGG
 CCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGATG
 TCTTCCCGAAAGCTATCGGGTAGAATATCAGATTTCGTTTT
 DotsOn=285
 45 GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCGCTG
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 GAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGGC

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DotsOn=285

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CGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGG
CCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGATG
TCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCATG

10 DotsOn=284

GGGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCGC
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ACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAG
GCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGAT
GTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTTCGTTT

DotsOn=284

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GGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTTCGCACGGGGCTTATTTAA
CGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGG
CCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGATG
TCTTCCCGAAAGCTATCGGGTAGAATATCAGATTTCGTTT

DotsOn=285

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TGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTTCGCACGGGGCTTATTTA
ACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAG
GCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGAT
GTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCAT

DotsOn=284

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GGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTTCGCACGGGGCTTATTTAA
CGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGG
CCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGATG
TCTTCCCGAAAGCTATCGGGTAGAATATCAGATTTCGTTT

DotsOn=285

GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCGCTG
GGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTTCGCACGGGGCTTATTTAAC
GAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGGC
CTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACCTACGATTCCACTCGACAATTTAGGATGT
CTTCCCGAAAGCTATCGGGTAGAATATCAGATTTCGTTTGA

DotsOn=284

Solutions: 10